SONY KP-5010/7210PS

MODEL

SERVICE MANUAL

SPECIFICATIONS

Projected Picture Size: 127 cm (50 inches) diagonally (KP-5010PS)
183 cm (72 inches) diagonally (KP-7210PS)

Audience Area: Viewing distance:
3 m (10 ft) minimum to 15 m (49 ft) maximum for KP-5010PS
5 m (16 ft) minimum to 25 m (82 ft) maximum for KP-7210PS
Optimum seating arrangement:
approx. 35° from center

Projected Picture Brightness: More than 60 fL (white peak) (KP-5010PS)
More than 30 fL (white peak) (KP-7210PS)

Projected Contrast Ratio: More than 30 : 1 (in darkened room)

Screen: Aluminum foil screen

Picture Tube: 20.3 cm, 8" high bright monochrome tube

Semiconductors: 191 transistors, 5 ICs, 118 diodes and 1 thyristor

Anode Voltage: 27 kV at zero beam current

Intermediate Output Power: 5 W (at 10 % harmonic distortion)

Speaker: 20 cm (8 inches), 8 Ω

Automatic Controls:
ABL (automatic brightness limiter)
ACC (automatic color control)
ACK (automatic color killer)
AFC (automatic frequency control)
ANC (automatic noise canceller)
AVR (automatic voltage regulator)

Input:

Signal	Connector	Signal level	Remarks
VIDEO IN	LINE BNC coaxial connector	1Vp-p	PAL, SECAM, NTSC, 4.43MHz, 75Ω, sync negative
AUDIO IN	LINE Minijack	−5dB (0.44V)	high impedance
	8-pin connector	−20dB (0.77V)	

Power Requirements: 220 V ac, 50/60 Hz

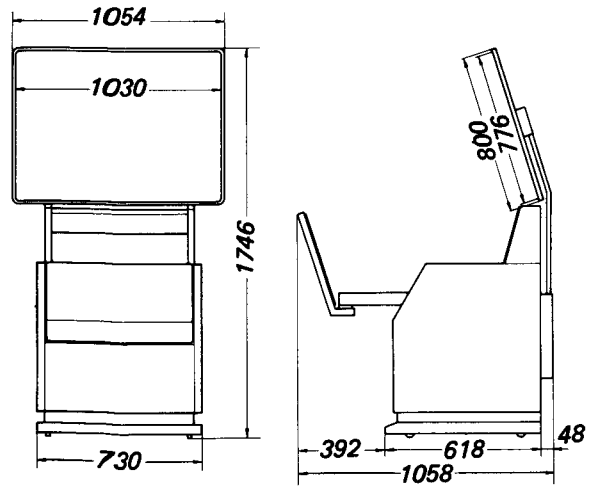
Power Consumption: 258 W (max.)

Dimensions: 50" screen: approx.
1054 (w) x 1746 (h) x 1058 (d) mm
41 ½ (w) x 68 ¾ (h) x 28 ¼ (d) inches
72" screen: approx.
1510 (w) x 2299.4 (h) x 1614.2 (d) mm
59 ½ (w) x 90 ½ (h) x 63 ½ (d) inches

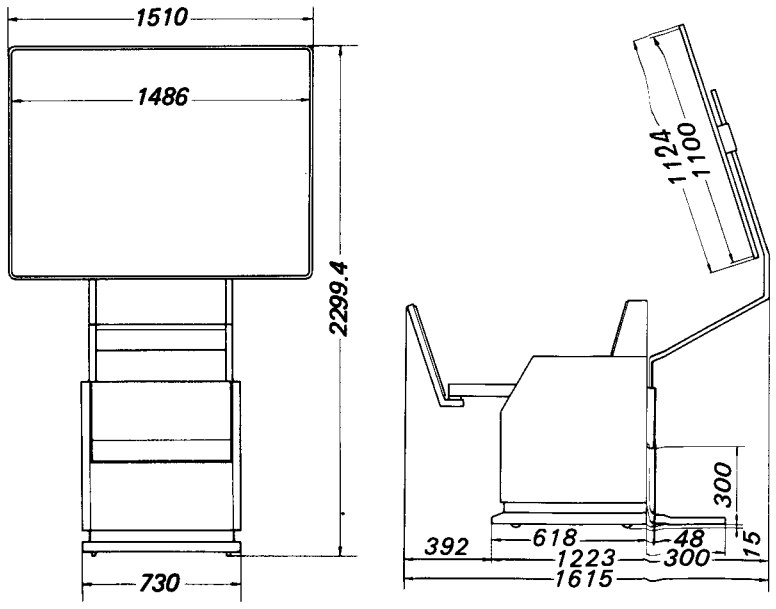
Weight: Approx. 96 kg, 211 lb 10 oz (KP-5010PS)
Approx. 101 kg, 222 lb 11oz (KP-7210PS) including screen

Accessories Supplied: 50-inch (KP-5010PS) or 72-inch (KP-7210PS) screen (diagonal measurement)
Screen support assembly
AC power cord
Polishing cloth

KP-5010PS



KP-7210PS



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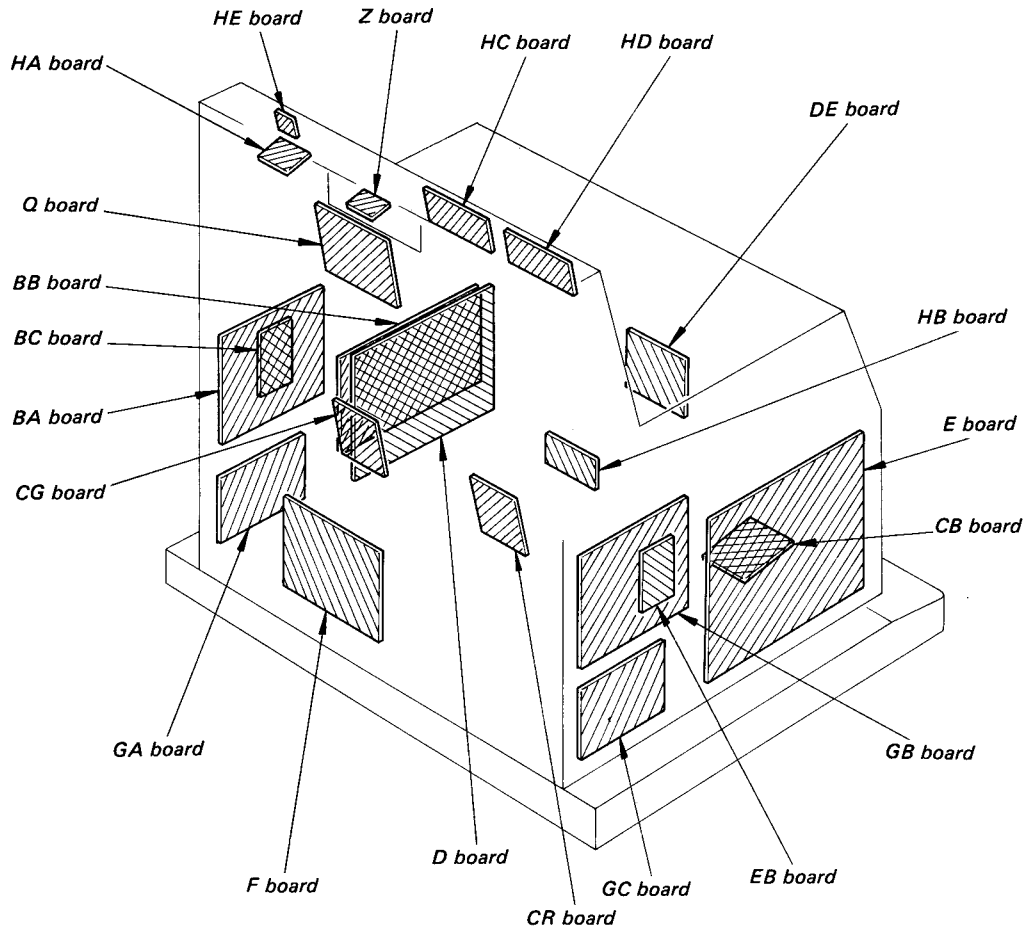
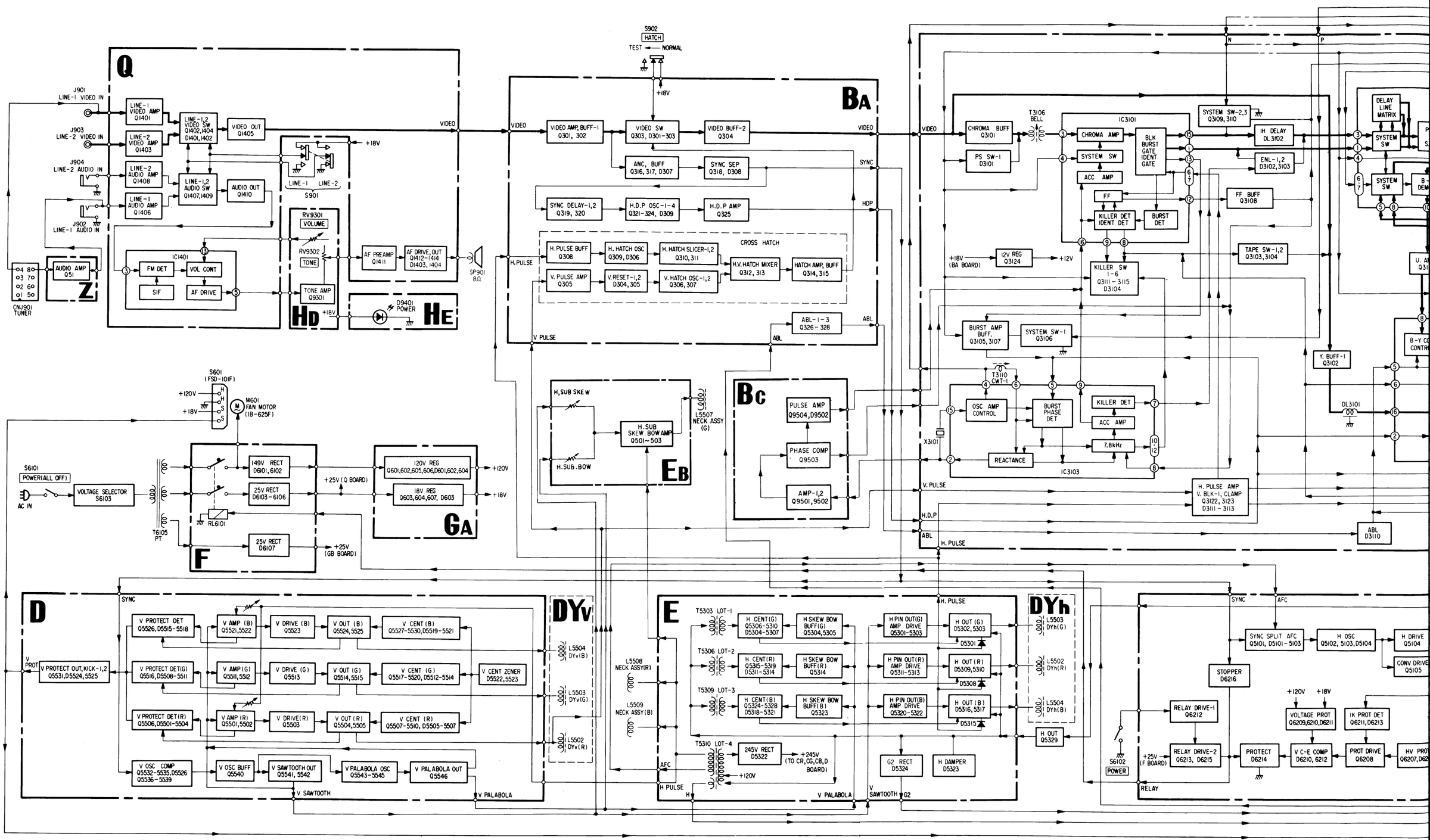
CIRCUIT BOARDS LOCATION

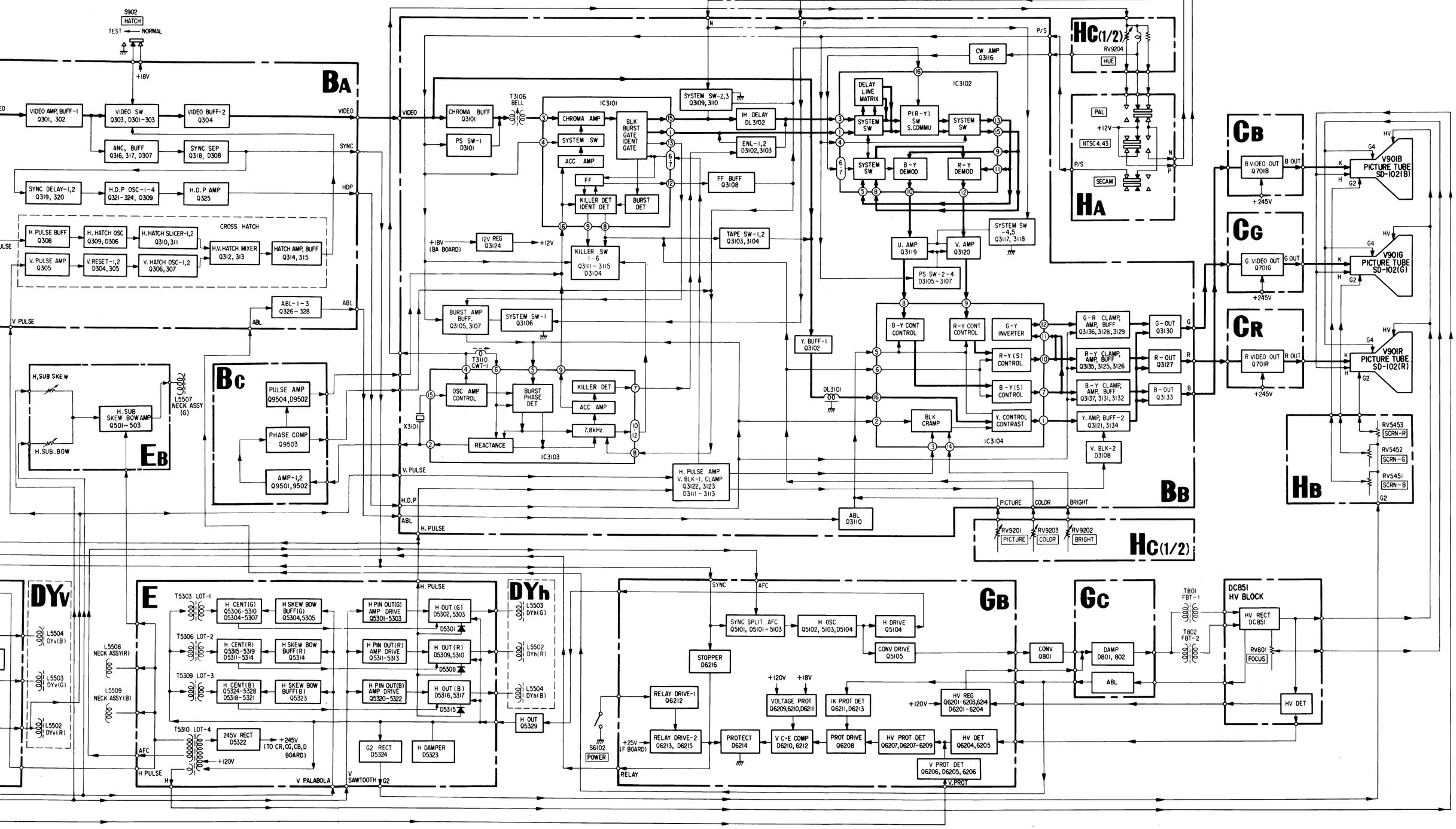


SECTION 1 OUTLINE

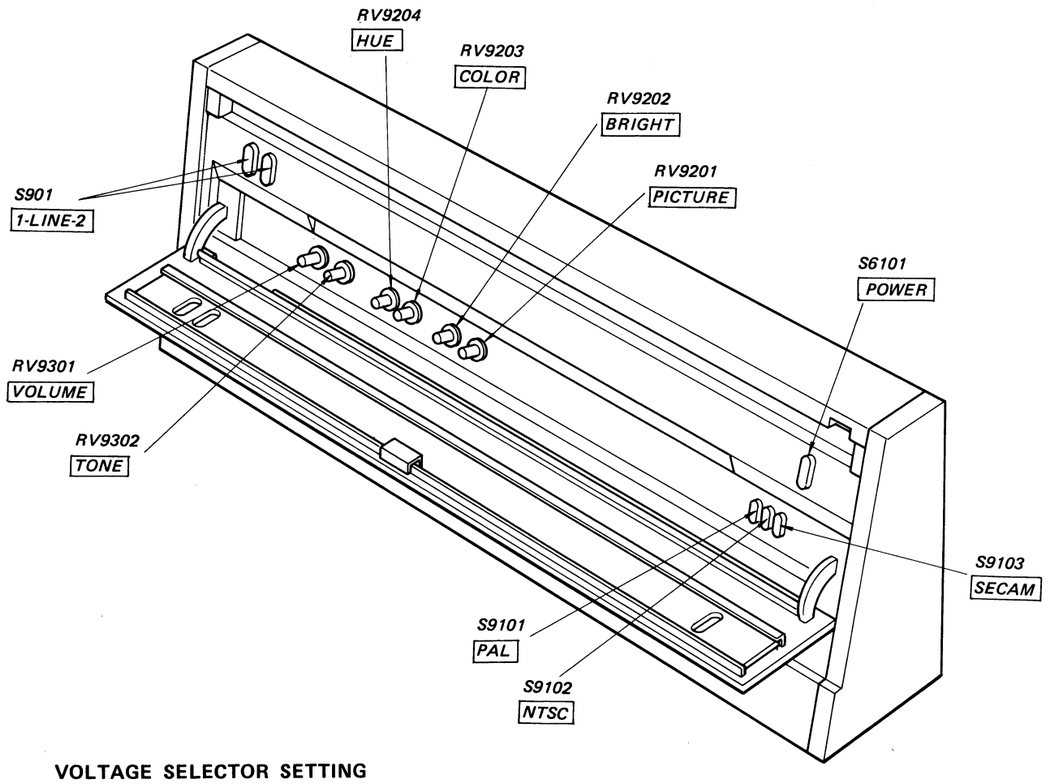
1-1. BLOCK DIAGRAM



SCC-208A-B/SCC-209A-B KP-5010PS/7210PS

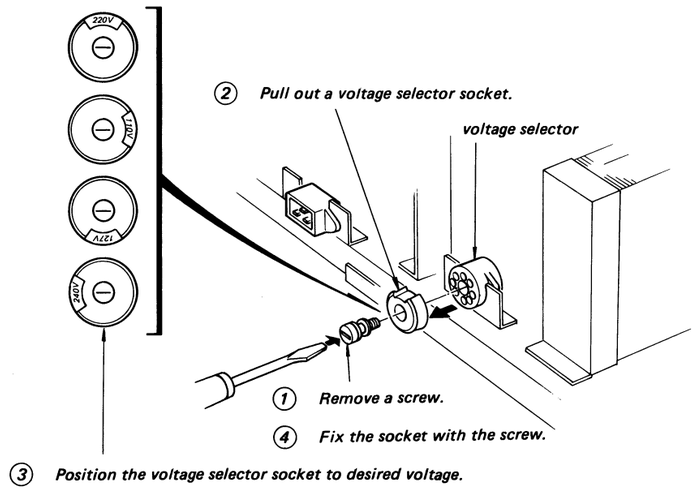


1-2. CONTROL PANEL VIEW



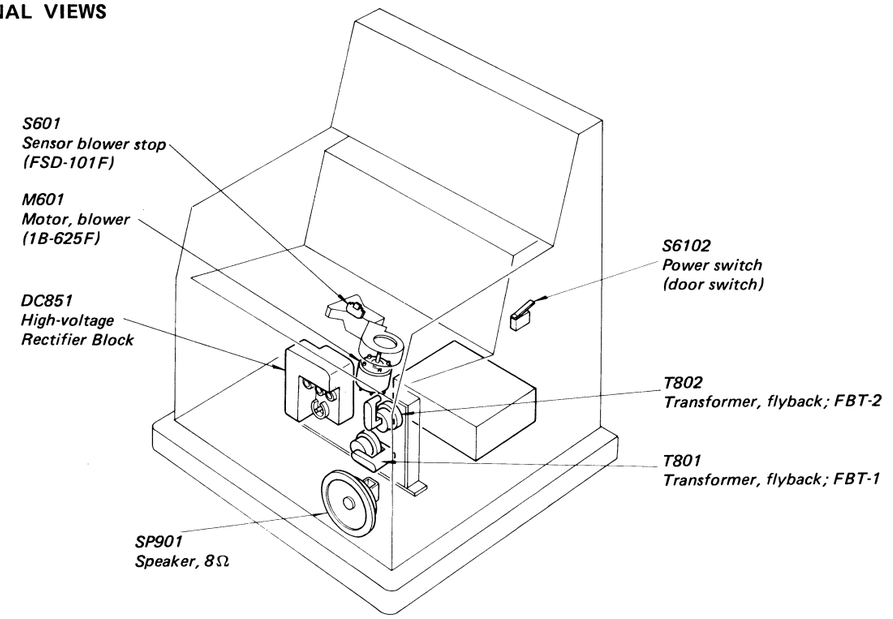
VOLTAGE SELECTOR SETTING

Set the voltage selector as shown below.

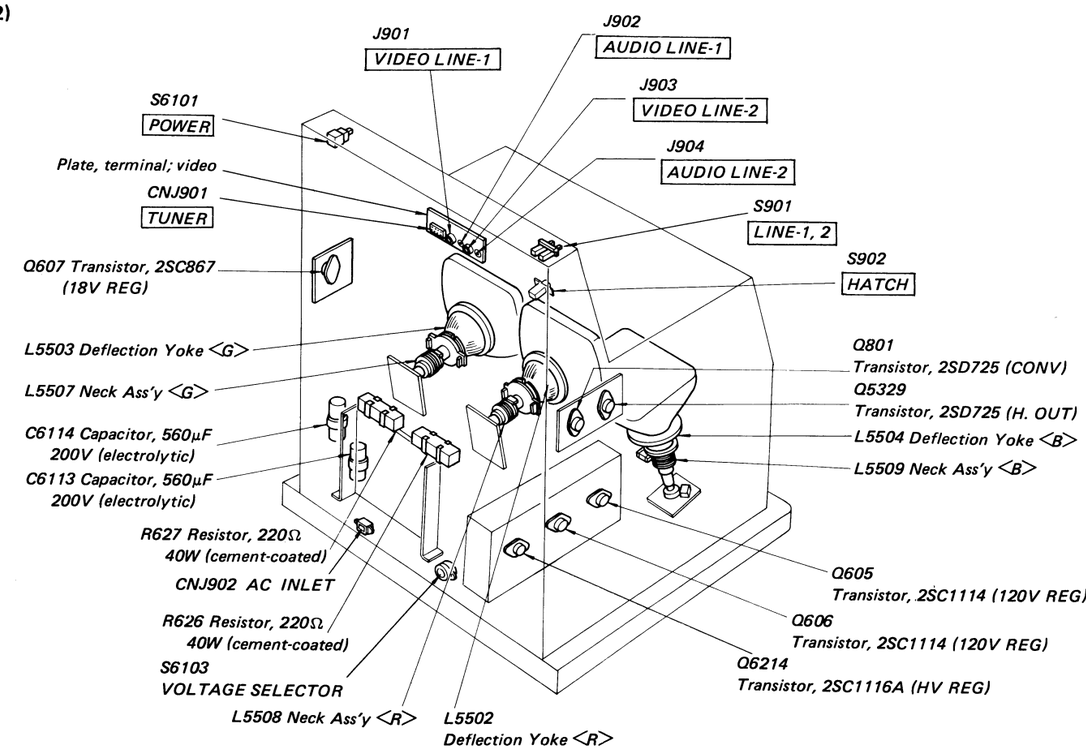


1-3. INTERNAL VIEWS

(1)

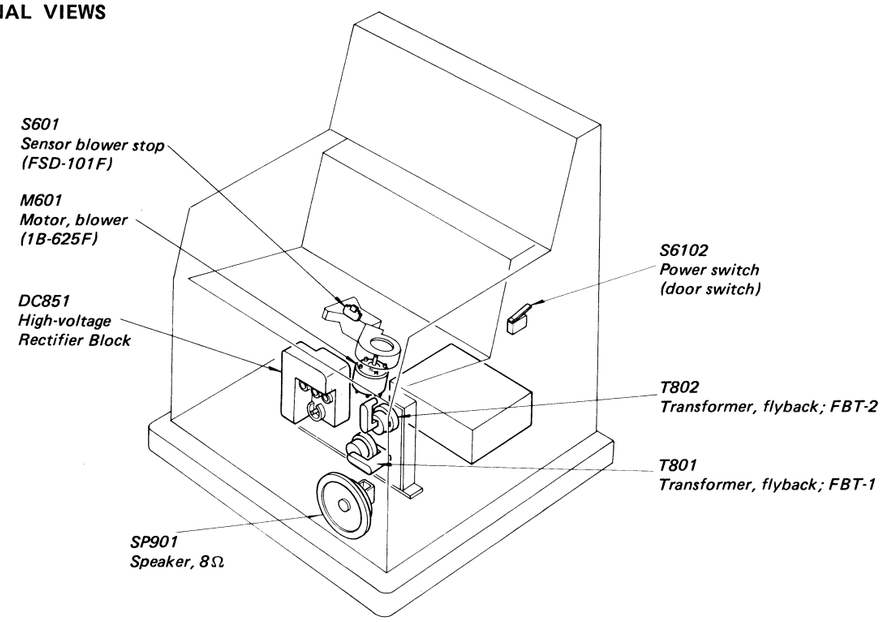


(2)



1-3. INTERNAL VIEWS

(1)



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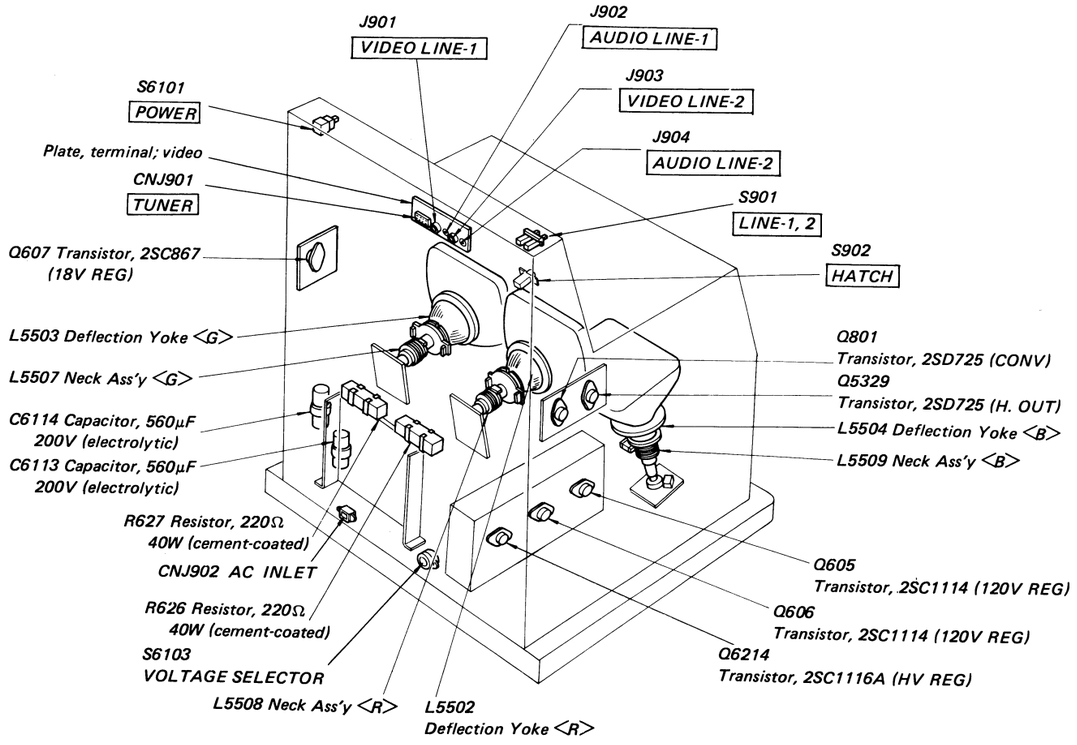
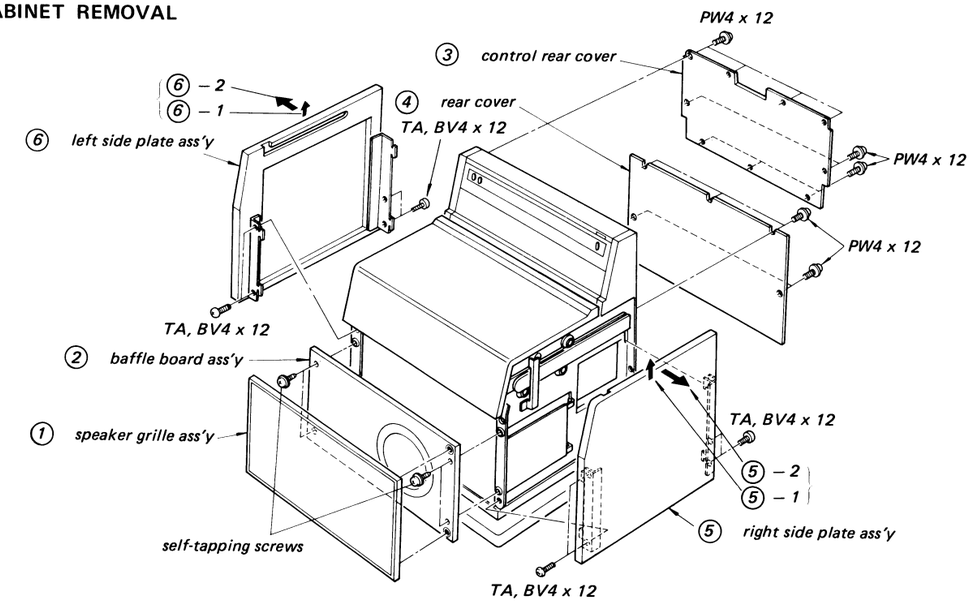


SECTION 2
DISASSEMBLY AND REPLACMENT

Note: • Follow the disassembly procedure in the numerical order given.

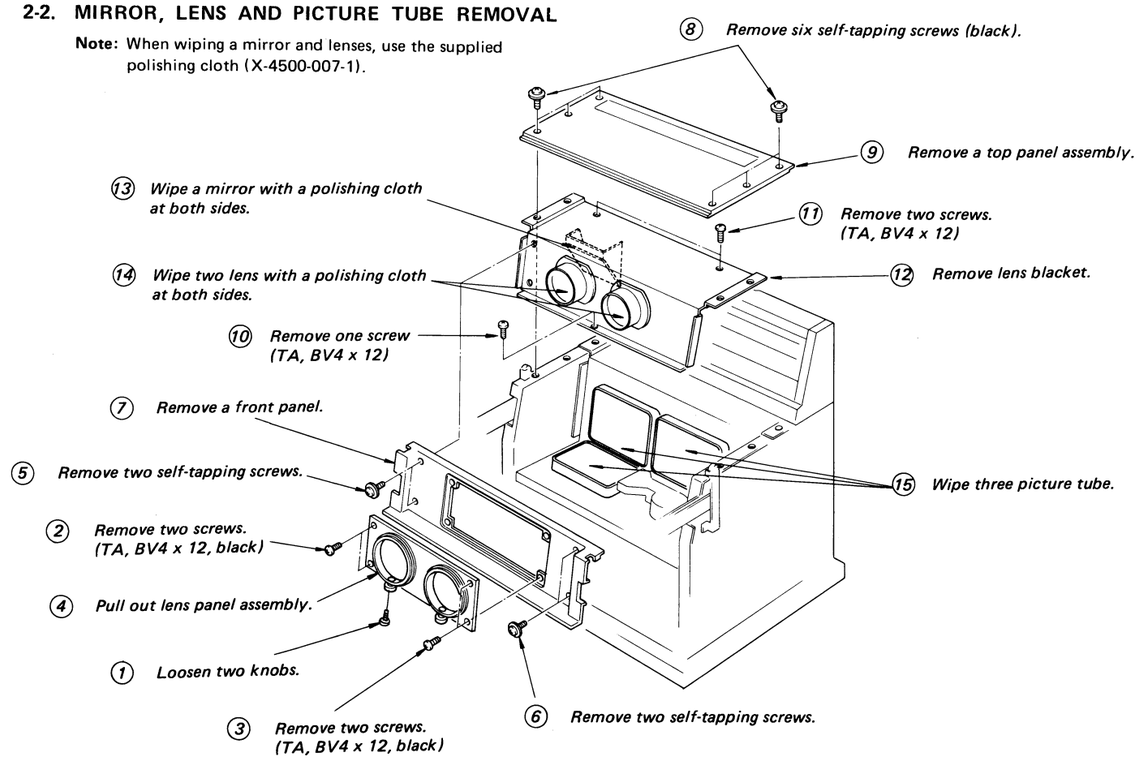
• All screws are Phillips (cross recess) type unless otherwise noted.
(–) = slotted head

2-1. CABINET REMOVAL

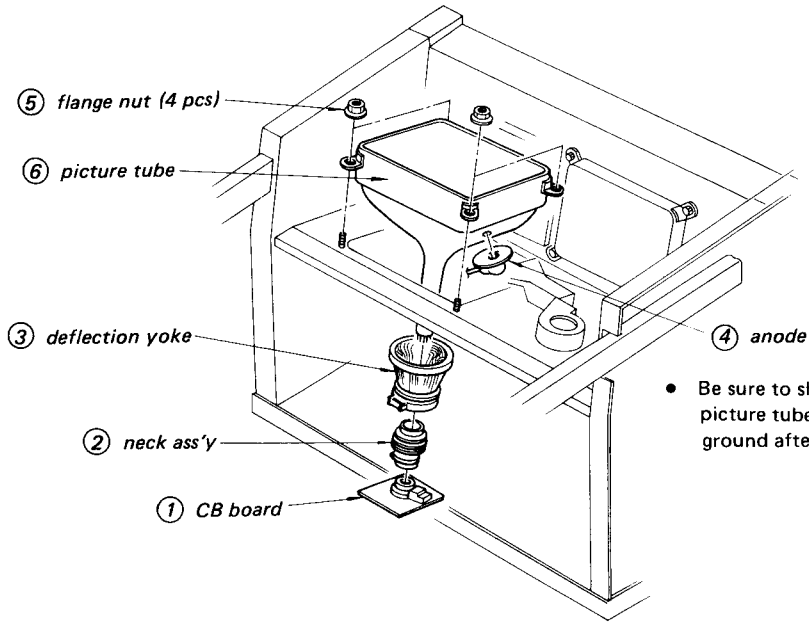


2-2. MIRROR, LENS AND PICTURE TUBE REMOVAL

Note: When wiping a mirror and lenses, use the supplied polishing cloth (X-4500-007-1).

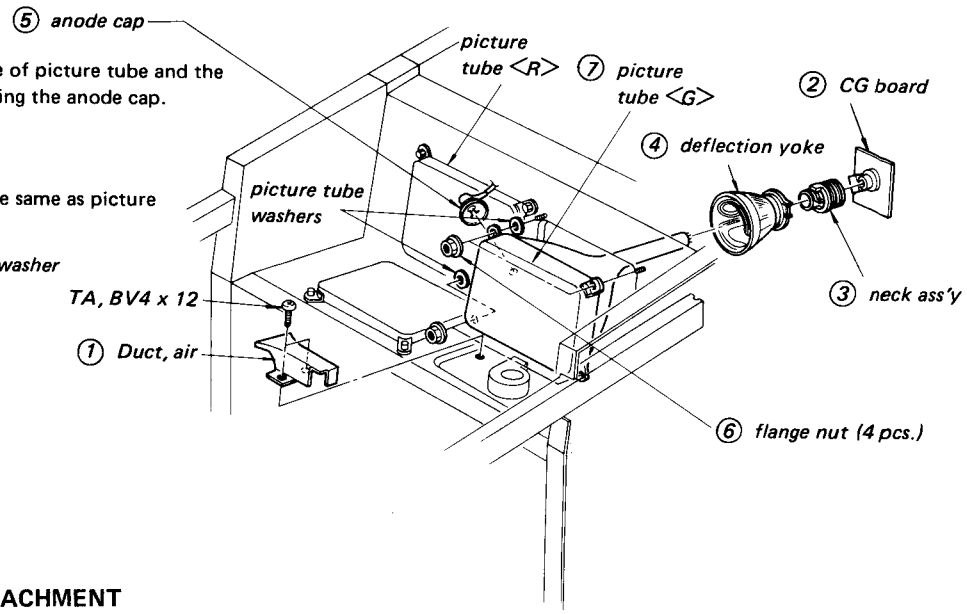


2-3. PICTURE TUBE <B> REMOVAL



- Be sure to short-circuit the anode of picture tube and the anode cap to ground after removing the anode cap.

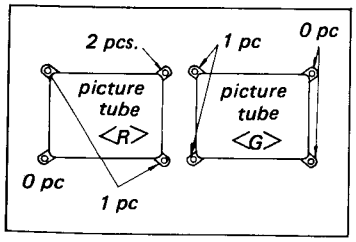
2-4. PICTURE TUBE <R·G> REMOVAL



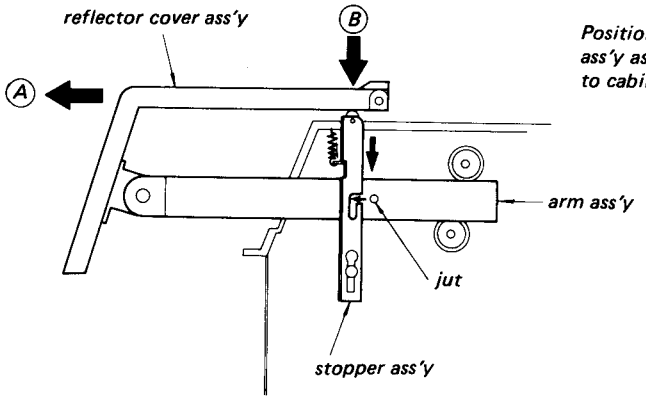
- Be sure to short-circuit the anode of picture tube and the anode cap to ground after removing the anode cap.

Note:
Picture tube <R> removal is the same as picture tube <G> removal.

Positions and numbers of picture tube washer are illustrated below.



2-5. REFLECTOR COVER ATTACHMENT



Position the jut of arm ass'y in the cut-out of the stopper ass'y as shown, and attach the side plate ass'y (right, left) to cabinet.

With reflector cover ass'y pressed in the direction shown by the arrow Ⓑ, pull it in the direction shown by the arrow Ⓐ, and the jut of arm ass'y can be installed in the cut-off.

SECTION 3
SETUP ADJUSTMENTS

3-1. REGISTRATION ADJUSTMENTS

- Before starting the adjustment, proceed the following procedures.
  - Degauss the whole chassis.
  - Set the unit toward the north as shown in Fig. 3-1.

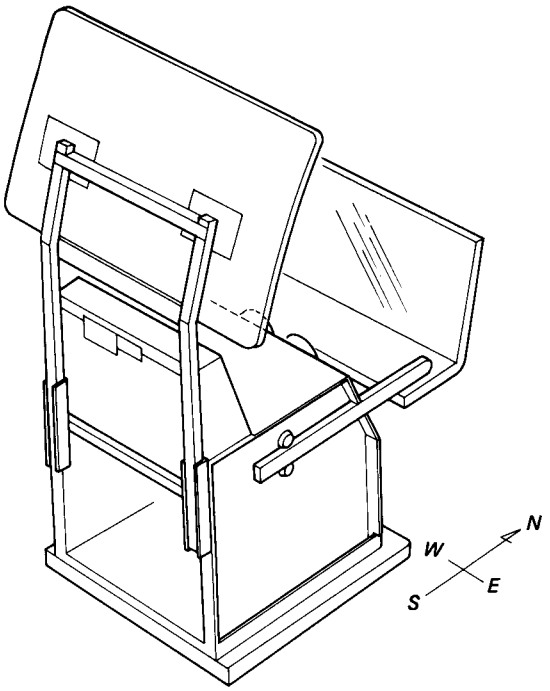


Fig. 3-1

- Set the three neck assemblies and the deflection yokes as shown in Fig. 3-2.

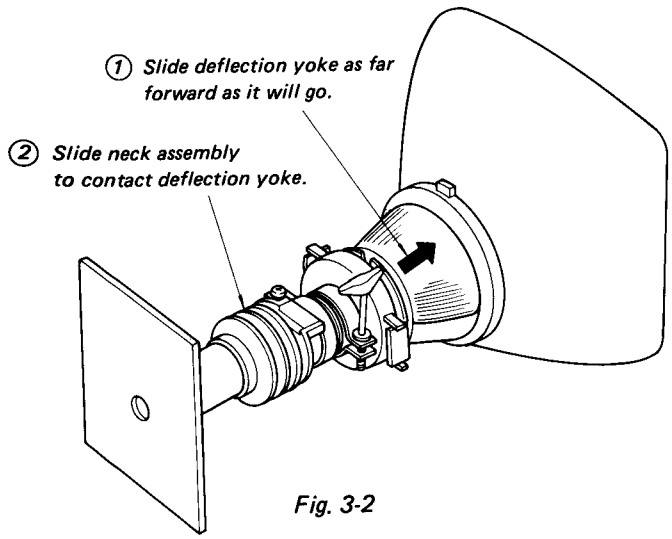


Fig. 3-2

- Controls and switches should be set as follows:
  HATCH switch ····· TEST
  BRIGHT control ····· fully clockwise (maximum)
  PICTURE control ····· fully clockwise (maximum)
  H SUB BOW-G (RV501) } mechanical center
  H SUB SKEW-G (RV502) } ··· (on EB or DE board)

(1) PICTURE TUBE FOCUS ADJUSTMENT

1) Set POWER switch to ON.
2) Look at the picture tube <G> through the lens and adjust RV801 for best focus. (Fig. 3-3)

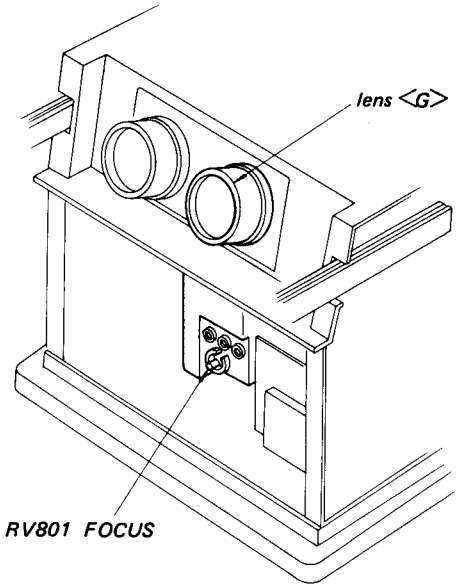


Fig. 3-3

3) Set the POWER switch to OFF.
4) Set the de-focus magnet as shown in Fig. 3-4 and apply suitable locking compound.

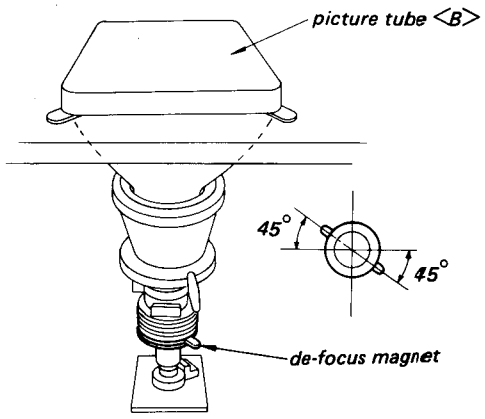


Fig. 3-4

(2) LENS FOCUS ADJUSTMENTS

1) Disconnect the BB-9 connector from BB board.
2) Cover the lens<R>/<B>with a cap or equivalent.
3) Set the POWER switch to ON.
4) Turn the lens<G>for best focus on the screen.
5) Tighten the set-screw<G>in position.
6) Remove the cap on the lens<R>/<B>and cover the lens<G>with a cap or equivalent.
7) Turn the lens<R>/<B>for best focus on the screen.
8) Tighten the set-screw<R>/<B>in position. (Fig. 3-5)

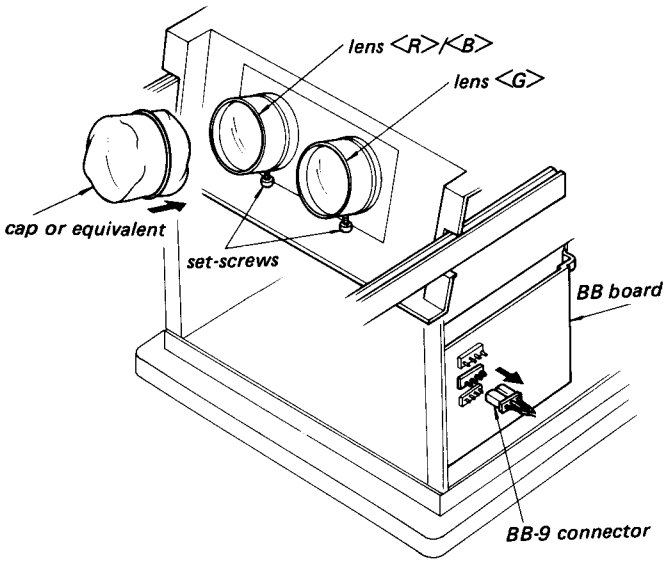


Fig. 3-5

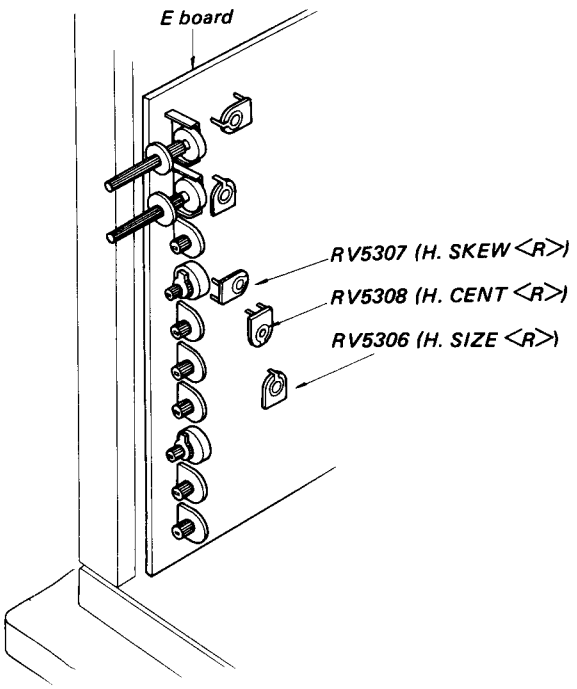


Fig. 3-6

(3) RED PICTURE ADJUSTMENT

1) Disconnect the BB-9 connector from the BB board, and cover the lens<G>with a cap or equivalent.
2) Rotate the red deflection yoke to make the horizontal center line of cross-hatch pattern horizontal as shown in Fig. 3-7.

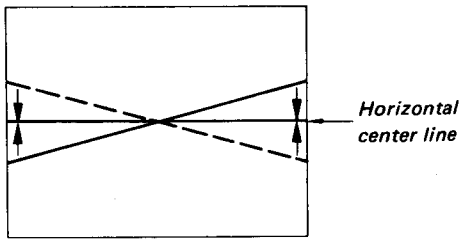


Fig. 3-7

3) Tighten the deflection yoke screw in position.
4) Position the neck assembly as shown in Fig. 3-8.

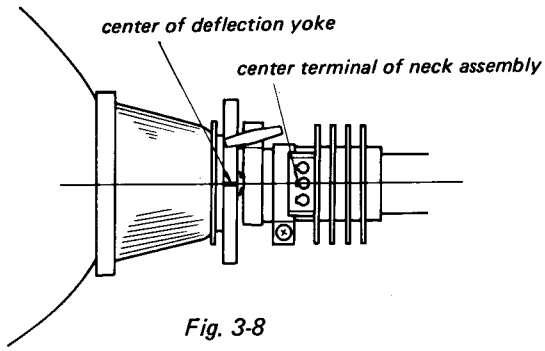


Fig. 3-8

5) Adjust RV5307 (H. SKEW<R>) to make the vertical center line of cross-hatch pattern vertical as shown in Fig. 3-9.

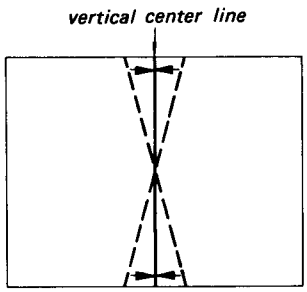


Fig. 3-9 (1)

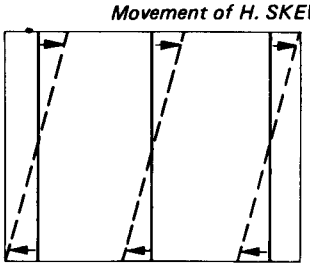


Fig. 3-9 (2)

6) Set the HATCH switch to NORMAL. (Fig. 3-10)

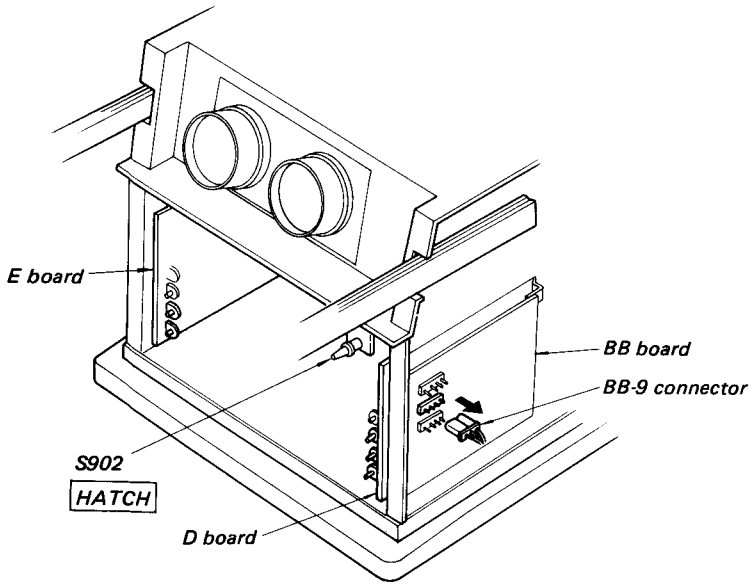


Fig. 3-10

7) Turn the PICTURE control 4/5 (80%) turns clockwise, and the BRIGHT control to mechanical-mid position.
8) Make the following adjustments.
   ① H. CENT<R>RV5308 . . . . . E board
      A) Tune in an off-air signal.
      B) Adjust RV5306 (H. SIZE<R>) so that the horizontal picture size is a little less than the screen size.
      C) Adjust RV5308 (H. CENT<R>) so that "a" is equal to "b" as shown in Fig. 3-11.

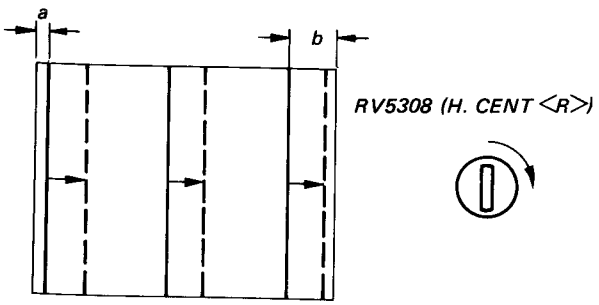


Fig. 3-11

D) Make H. SIZE (RV5306<R>) adjustment.

② H. SIZE<R>RV5306 . . . . . E board
   A) Tune in an off-air signal.
   B) Adjust RV5306 (H. SIZE<R>) so that the horizontal picture size is as shown in Fig. 3-12 (1).

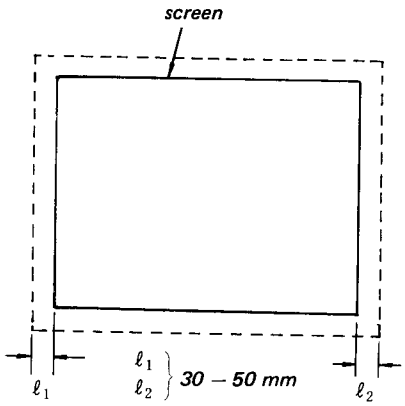


Fig. 3-12 (1)

Movement of H. SIZE (RV5306 <R>)

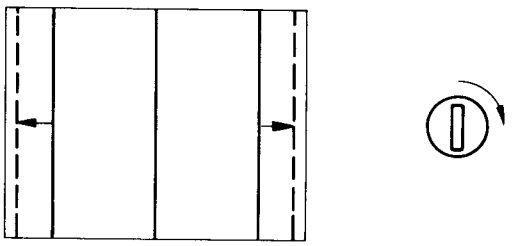


Fig. 3-12 (2)

③ V. CENT<R>RV5502 . . . . . D board
   A) Tune in an off-air signal.
   B) Adjust RV5501 (V. SIZE<R>) so that the vertical picture size is a little less than the screen size.
   C) Adjust RV5502 (V. CENT<R>) so that "a" is equal to "b" as shown in Fig. 3-13.

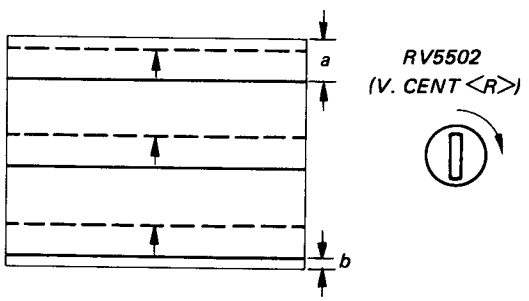


Fig. 3-13

D) Make V. SIZE<R>(RV5501) adjustment.

④ V. SIZE<R>RV5501 . . . . . D board
A) Tune in an off-air signal.
B) Adjust RV5501 (V. SIZE <R>) so that the vertical picture size is as shown in Fig. 3-14 (1).

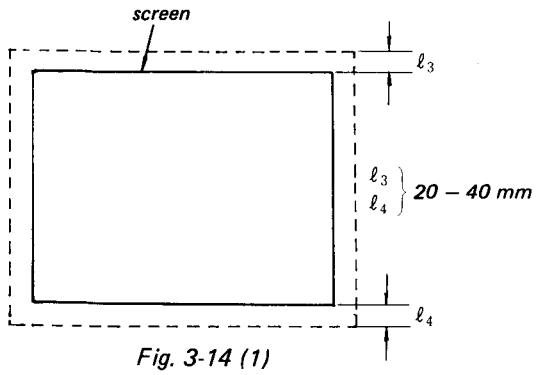


Fig. 3-14 (1)

Movement of V. SIZE (RV5501 <R>)

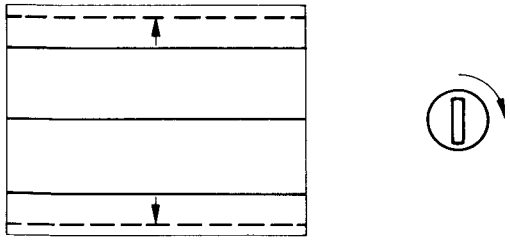


Fig. 3-14 (2)

If the V. CENT<R> adjustment can not be obtained by the step ③ , make the following adjustment,
A) Adjust RV5502 (V. CENT<R>) for mechanical-mid position.
B) Tune in an off-air signal.
C) Adjust RV5501 (V. SIZE <R>) so that the vertical picture size is a little less than the screen size.
D) Adjust the screw so that the picture is at the center of the screen as shown in Fig. 3-15.
E) Make the V. CENT (RV5502 <R>) and the V. SIZE (RV5501 <R>) adjustments. (Fig. 3-15)

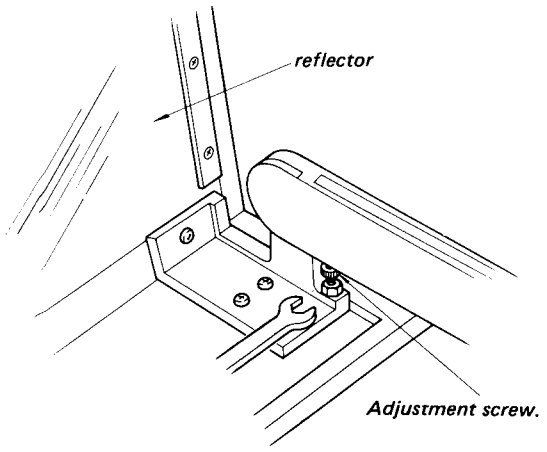


Fig. 3-15

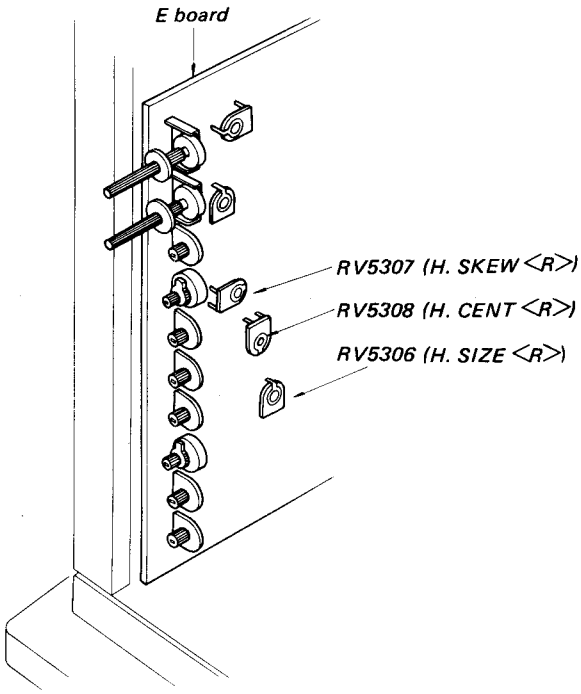


Fig. 3-16

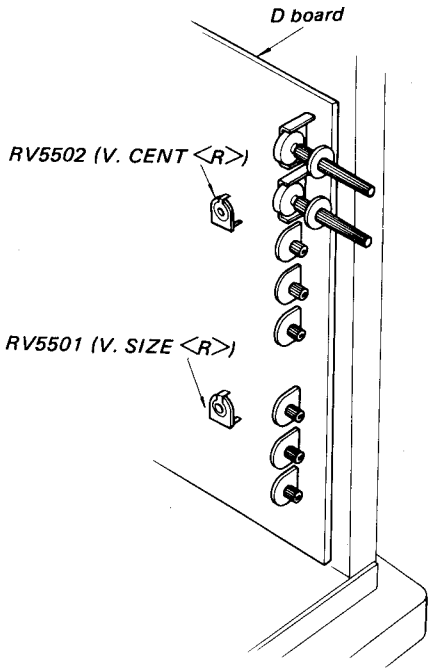


Fig. 3-17

(4) VERTICAL ADJUSTMENT OF RED AND GREEN PICTURES

1) Set the HATCH switch to TEST.
2) Disconnect the BB-9 connector from the BB board.
3) Adjust RV5506 (V. CENT <G>) to approach the green horizontal center line to the red horizontal center line properly for easier adjustment.
4) Rotate the deflection yoke<G>so that the green horizontal center line is parallel with the red horizontal center line (Fig. 3-18) or "ℓ_1" ("ℓ_3") is equal to "ℓ_2" ("ℓ_4") (Fig. 3-19).

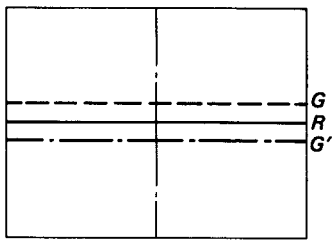


Fig. 3-18

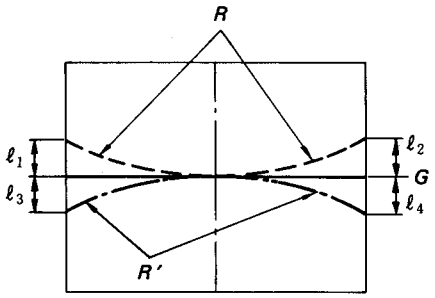


Fig. 3-19

5) Tighten the deflection yoke screw<G>in position
6) Position the neck assembly <G> as shown in Fig. 3-8. Tighten the neck assembly screw in position.
7) A) When the green horizontal center line is positioned as shown in Fig. 3-18;
   Adjust RV5506 (V. CENT<G>) to converge the green horizontal center line and red horizontal center line.
   B) When the green horizontal center line is position as shown in Fig. 3-19;
   ① Rotate the neck assembly <R> so that the red horizontal center line is parallel with the green horizontal center line, and tighten neck assembly screw <R> in position.
   ② Perform the step A). (Fig. 3-20)

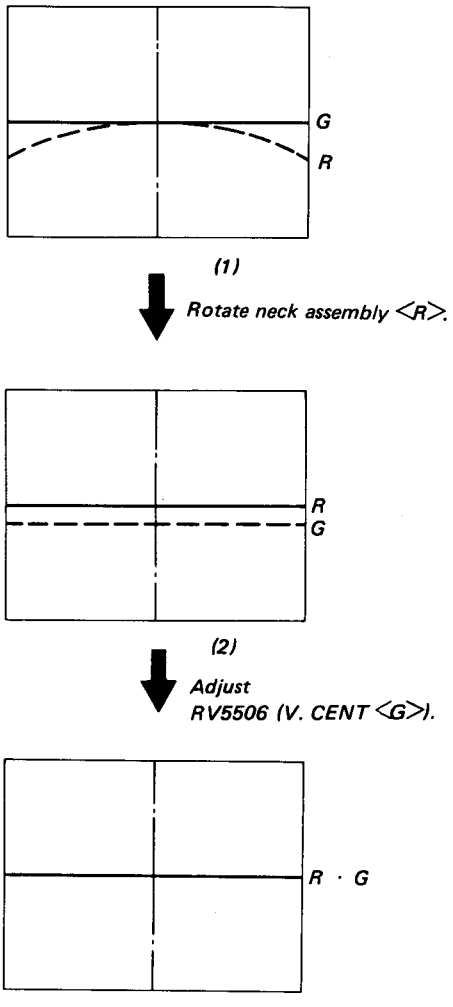


Fig. 3-20

8) When the green horizontal center line is slanting as shown in Fig. 3-21.

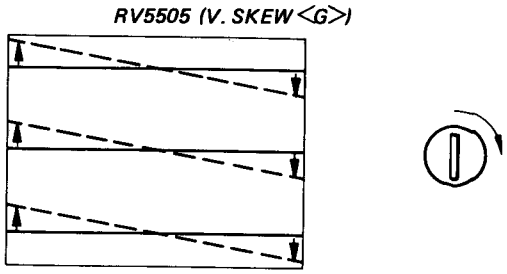


Fig. 3-21

① Adjust RV5505 (V. SKEW<G>) so that the red horizontal center line is parallel with the green horizontal center line.
② Repeat the procedures 6) and 7).

9) When the vertical adjustment can not be obtained by using RV5505 (V. SKEW<G>), set RV5505 (V. SKEW <G>) to the mechanical-mid position and perform the step (4) through (7) again.
10) Adjust RV5503 (V. SIZE <G>) so that "ℓ_1" is equal to "ℓ_2" as shown in Fig. 3-22.

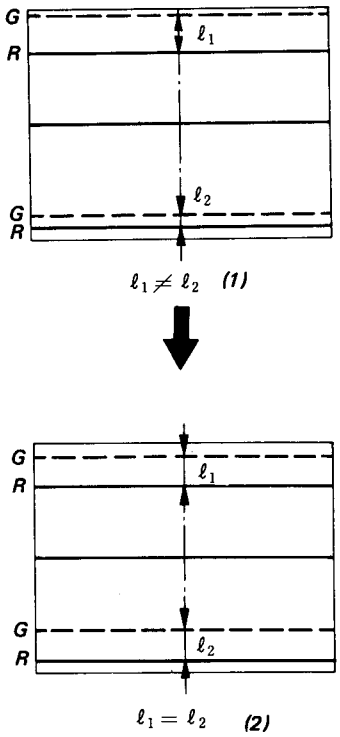


Fig. 3-22

11) Adjust RV5504 (V. LIN<G>) so that "ℓ_1", "ℓ_2" and "ℓ_3" are equal as shown in Fig. 3-23 (1).

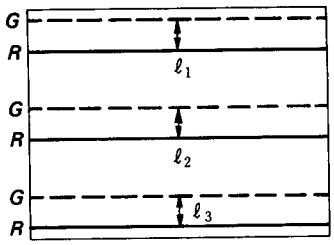


Fig. 3-23 (1)

Movement of V. LIN (RV5504 <G>)

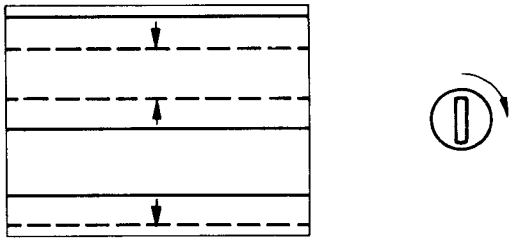


Fig. 3-23 (2)

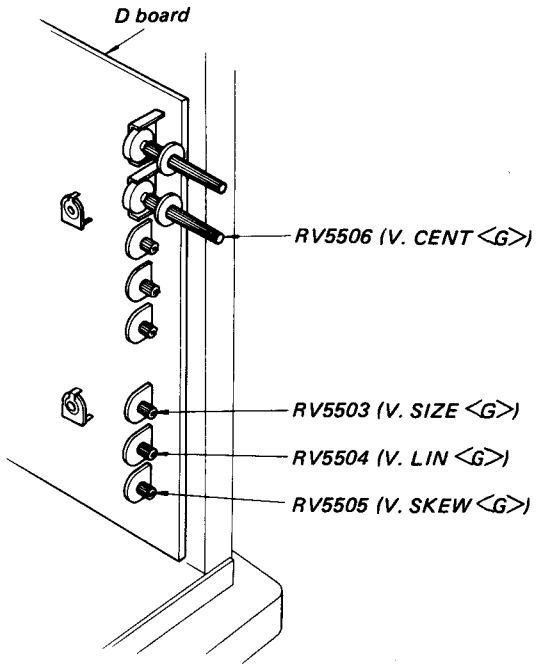


Fig. 3-24

12) Adjust RV5506 (V. CENT <G>) to converge the green horizontal lines and the red horizontal lines as shown in Fig. 3-25 (1).

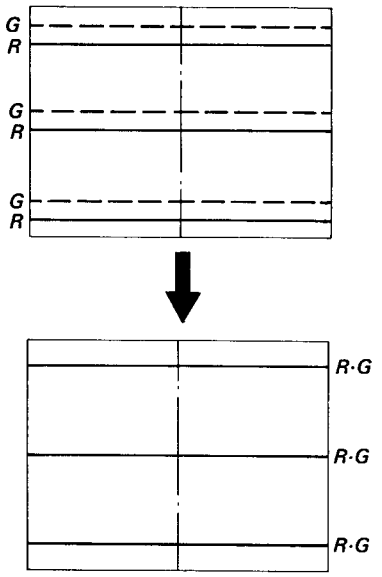


Fig. 3-25 (1)

Movement of RV5506 (V. CENT <G>)

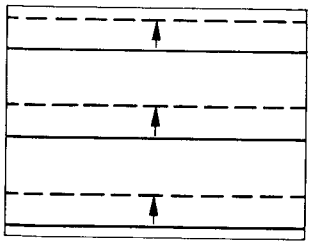


Fig. 3-25 (2)

If necessary, repeat the steps 10) through 12).

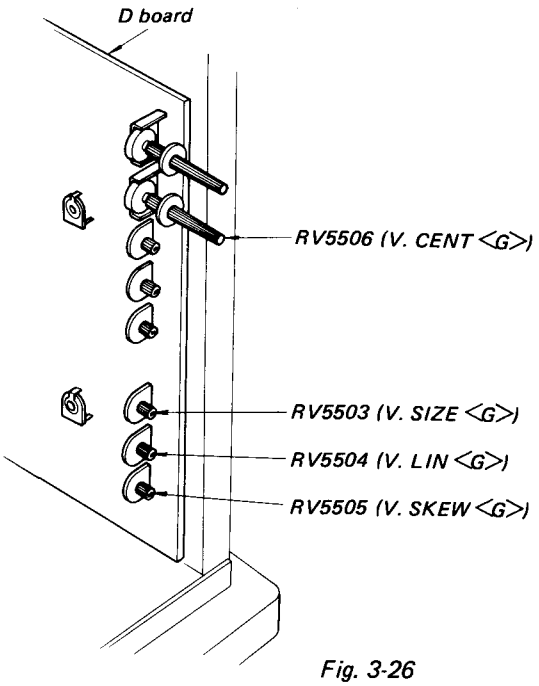


Fig. 3-26

(5) HORIZONTAL ADJUSTMENT OF RED AND GREEN PICTURES

1) Set the HATCH switch to TEST.
2) Disconnect the BB-9 connector from the BB board.
3) Adjust RV5305 (H. CENT <G>) to approach the green vertical center line to the red vertical center line properly for easier adjustment.
4) Adjust RV5303 (H. SKEW<G>) so that the green vertical center line is parallel with the red vertical center line (Fig. 3-27) or "ℓ_1" ("ℓ_3") is equal to "ℓ_2" ("ℓ_4") (Fig. 3-28).

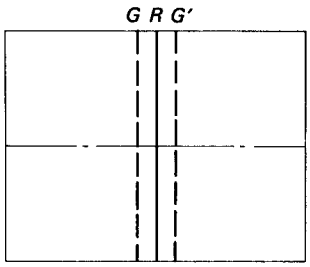


Fig. 3-27

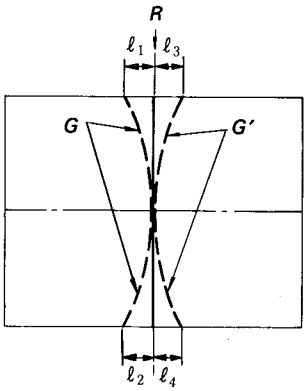


Fig. 3-28

Movement of RV5303 (H. SKEW <G>)

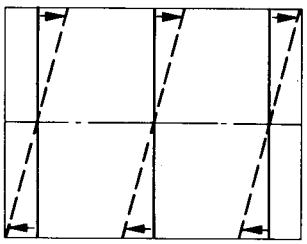


Fig. 3-29

5) A) When the green center line is positioned as shown in Fig. 3-27;
Adjust RV5305 (H. CENT<G>) to cenverge the green vertical center line and the red vertical center line.

B) When the green center line is positioned as shown in Fig. 3-28;

① Adjust RV5304 (H. BOW <G>) so that the vertical center line is parallel with the red vertical center line.

② Perform the step A).

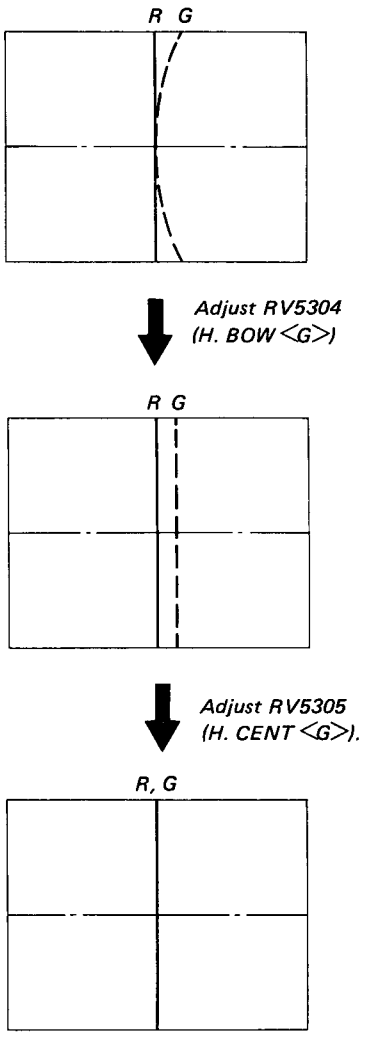


Fig. 3-30 (1)

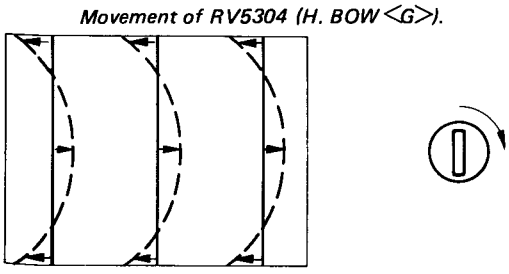


Fig. 3-30 (2)

6) Adjust RV5301 (H. KEYS<G>) so that the green vertical lines are parallel with the red vertical lines on the entire screen in Fig. 3-31 (1).

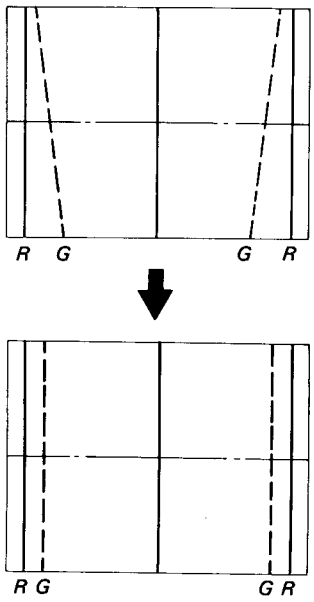


Fig. 3-31 (1)

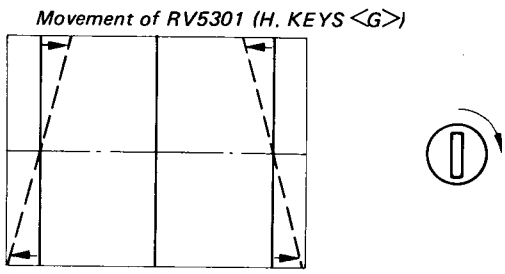


Fig. 3-31 (2)

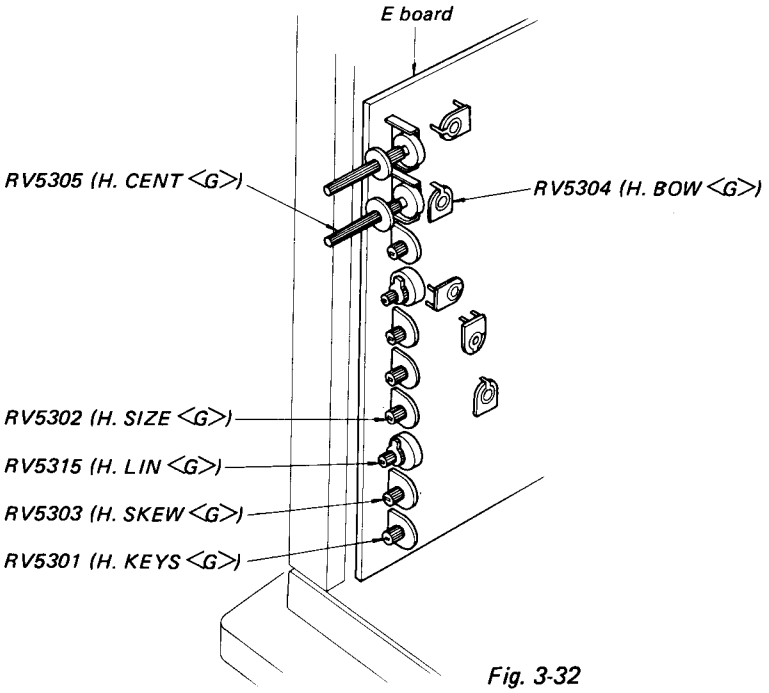


Fig. 3-32

7) Adjust RV5302 (H. SIZE <G>) so that " ℓ_1 " is equal to " ℓ_2 " as shown in Fig. 3-33 (1).

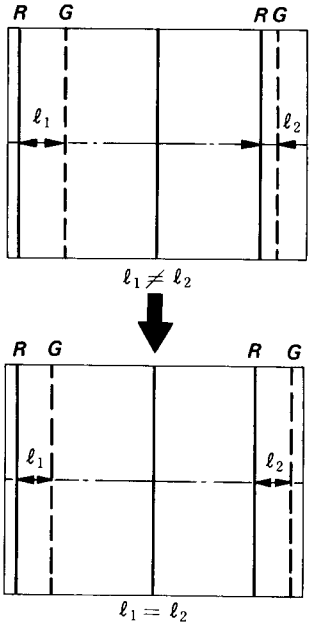


Fig. 3-33 (1)

Movement of RV5302 (H. SIZE <G>)

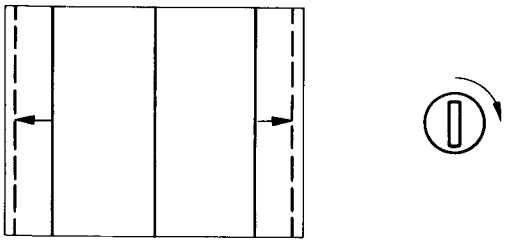


Fig. 3-33 (2)

8) Adjust RV5315 (H. LIN<G>) so that " ℓ_1 ", " ℓ_2 " and " ℓ_3 " are equal as shown in Fig. 3-34 (1).

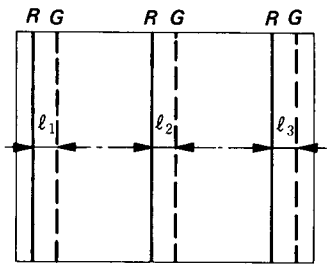


Fig. 3-34 (1)

Movement of RV5315 (H. LIN <G>)

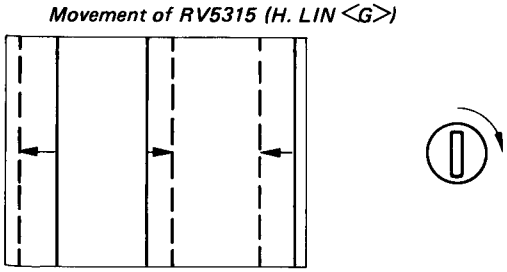


Fig. 3-34 (2)

9) Adjust RV5305 (H. CENT<G>) to converge the green vertical lines and the red vertical lines as shown in Fig. 3-35 (1).

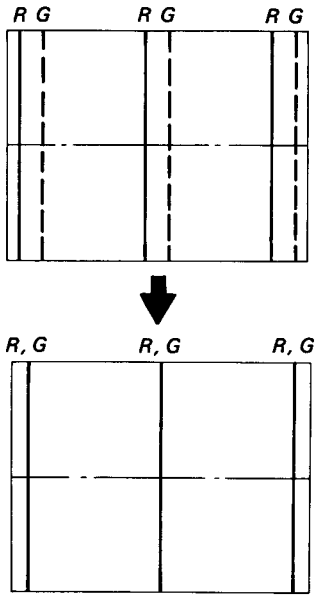


Fig. 3-35 (1)

Movement of RV5305 (H. CENT <G>)

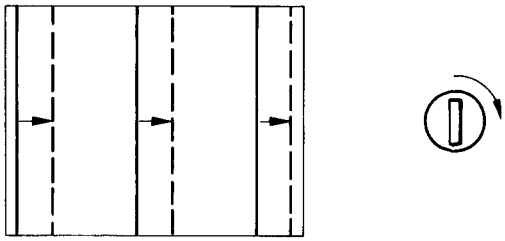


Fig. 3-35 (2)

If necessary, repeat the steps 7) through 9).

10) When the green vertical lines slanting at the both sides of the screen as shown in Fig. 3-36; Readjust RV5301 (H. KEYS<G>) so that " ℓ_1 " is equal to " ℓ_2 ".

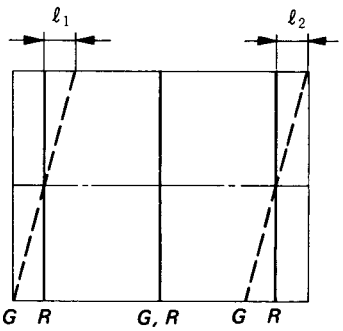


Fig. 3-36

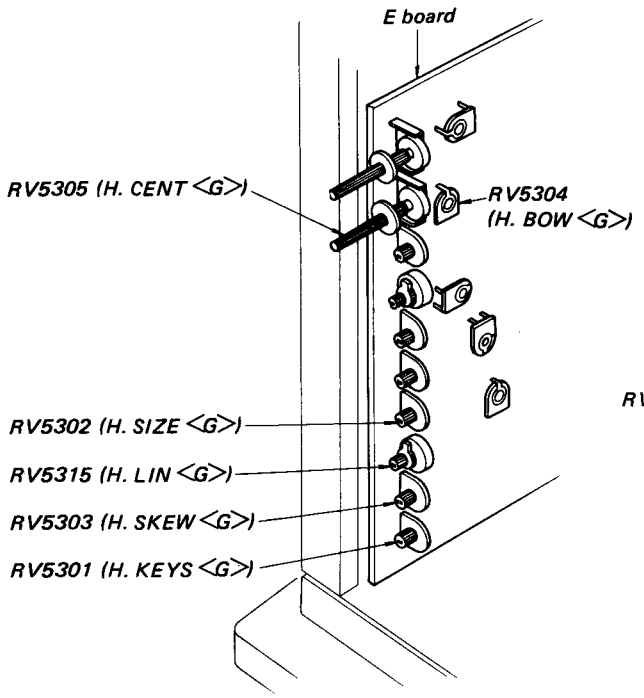


Fig. 3-37

11) If the registration can not be adjusted, perform fine adjustment of RV501 (H. SUB. BOW <G>) and RV502 (H. SUB SKEW <G>).

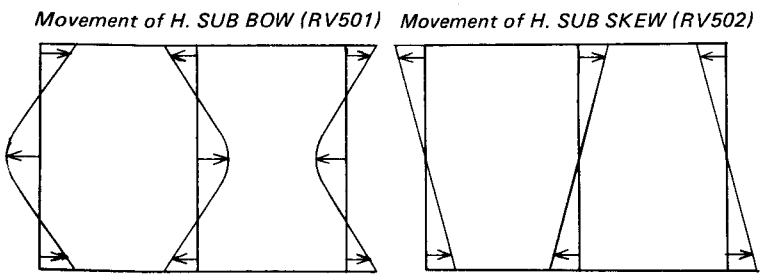


Fig. 3-38 (1) Fig. 3-38 (2)

12) If necessary, repeat the steps 10) and 11).

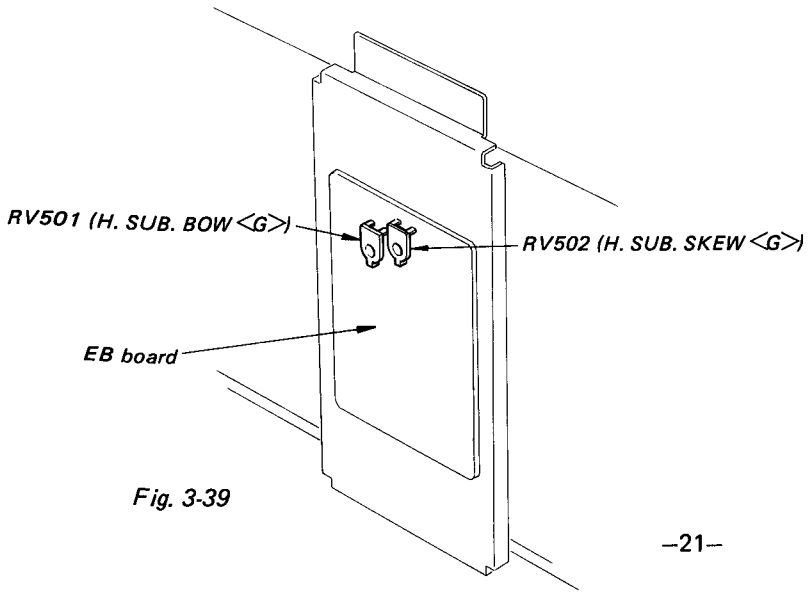


Fig. 3-39

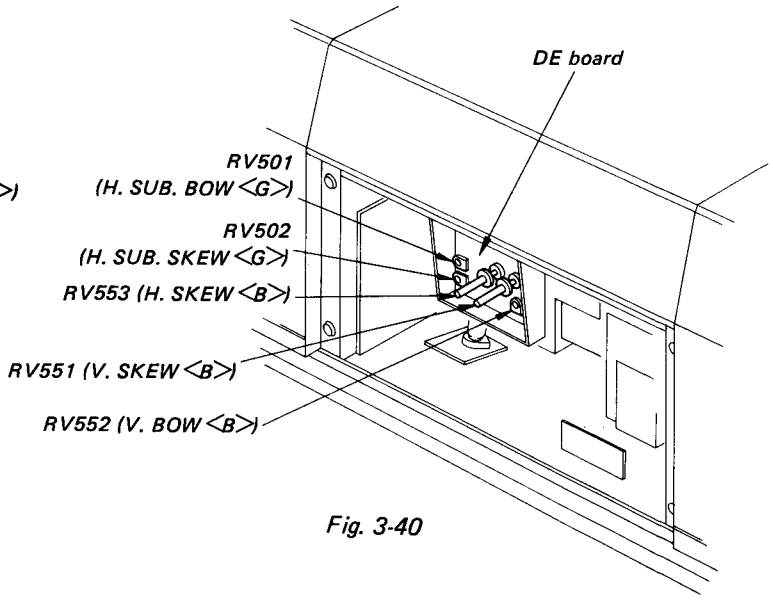


Fig. 3-40

(6) FINE ADJUSTMENT OF GREEN AND RED VERTICAL AND HORIZONTAL PICTURES

When the mis-resistration appears at the corners on the screen, affix a permalloy ass'y as shown in Fig. 3-41. (X-4309-608-0 Permalloy Ass'y, convergence compensation)

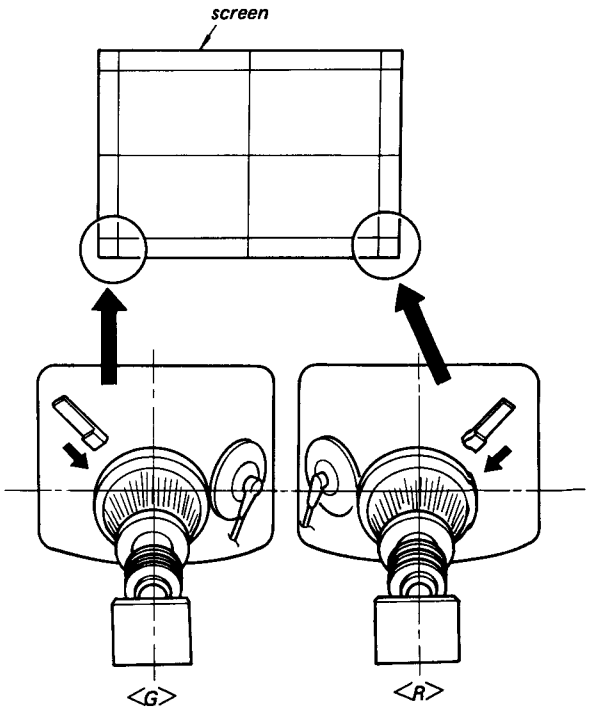


Fig. 3-41

(7) VERTICAL AND HORIZONTAL ADJUSTMENTS OF RED AND BLUE PICTURES

1) Set HATCH switch to TEST.
2) Connect the BB-9 connector on the BB board.
3) Cover the lens <G> with a cap or equivalent.
4) Adjust RV5313 (H. CENT<B>) and RV5510 (V. CENT<B>) to approach the center of blue cross-hatch pattern to center of red cross-hatch pattern.

Make the following adjustments (Refer to the RED AND GREEN PICTURE ADJUSTMENTS as described in the procedure (4), (5) and (6).

• VERTICAL ADJSTMENT RED AND BLUE PICTURES

1) Rotation of deflection yoke<B>.
2) Rotation of neck assembly<B>.
3) RV5510 (V. CENT<B>)
4) RV5509 (V. SKEW <B>) on E board or RV551 (V. SKEW <B>) on DE board.
5) RV552 (V. BOW <B>)
6) If necessary, repeat the above steps.
7) RV5507 (V. SIZE <B>)
8) RV5508 (V. LIN <B>)
9) RV5510 (V. CENT <B>)
10) If necessary, repeat the steps 7) through 9).

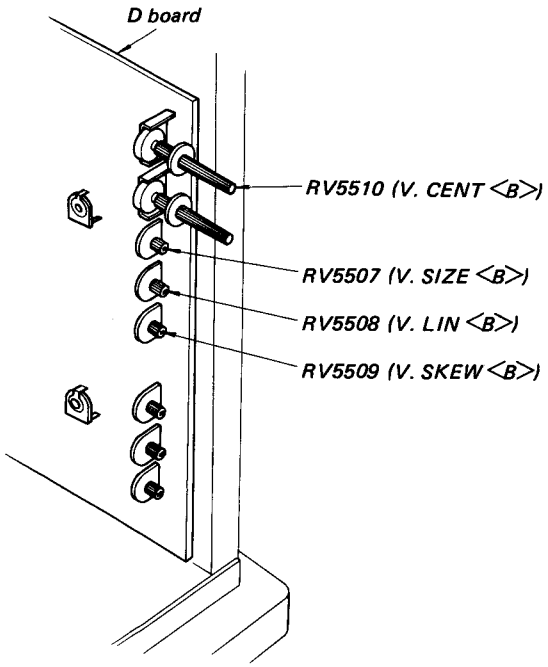


Fig. 3-42

• HORIZONTAL ADJUSTMENT RED AND BLUE PICTURES

1) RV5311 (H. SKEW <B>) on E board or RV553 (H. SKEW <B>) on DE board.
2) RV5312 (H. BOW<B>)
3) RV5313 (H. CENT<B>)
4) If necessary, repeat the above steps.
5) RV5309 (H. KEYS<B>)
6) RV5310 (H. SIZE<B>)
7) RV5314 (H. LIN<B>)
8) RV5313 (H. CENT<B>)
9) If necessary, repeat the steps 5) through 8).
10) RV5309 (H. KEYS<B>)

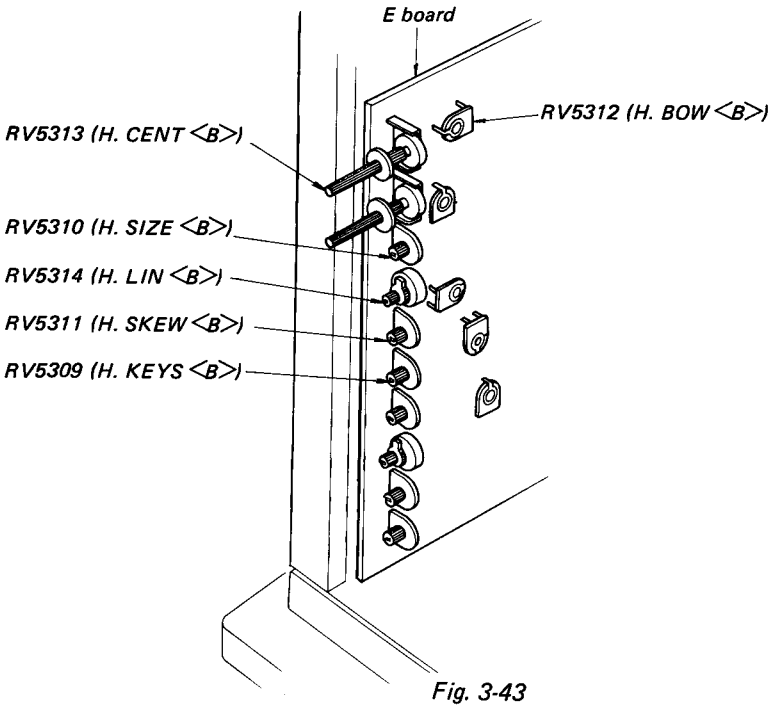


Fig. 3-43

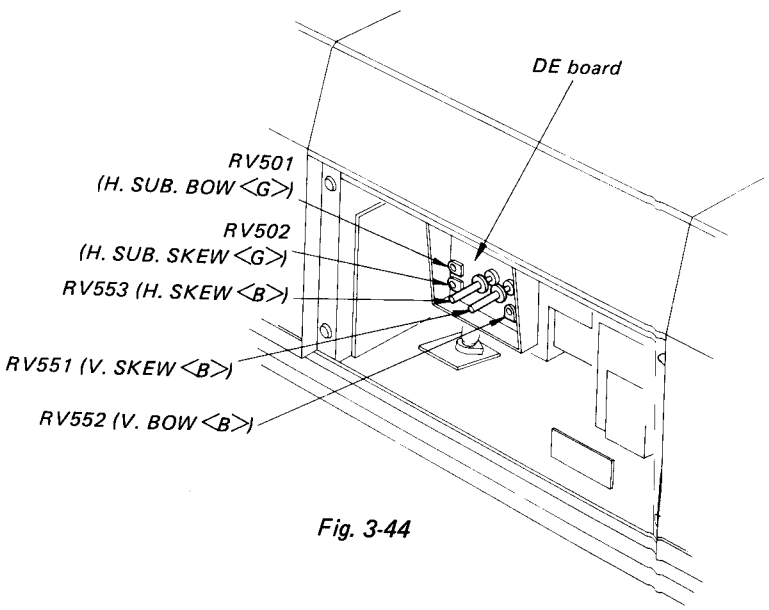


Fig. 3-44

3-2. WHITE BALANCE ADJUSTMENTS

1) Controls and switches should be set as follows;
   HATCH siwtch ..... NORMAL
   COLOR control ..... fully counterclockwise
2) Tune in an off-air signal.
3) Set RV5451 (SCRN-B), RV5452 (SCRN-G) and RV5453 (SCRN-R) to mechanical-mid position.
4) Turn the BRIGHT and the PICTURE controls fully counterclockwise.
5) Cover the lens<R>/<B>with a cap or equivalent.
6) Turn RV5452 (SCRN-G) slowly to obtain a faintly visible cross-hatch on the screen.
7) Remove the cap.
8) Adjust RV5451 (SCRN-B) and RV5453 (SCRN-R) for best white balance (natural gray) of faint cross-hatch.
9) Turn the BRIGHT and the PICTURE controls fully clockwise.
10) Turn the RV3109 (G. DRIVE) fully clockwise.
11) Adjust RV3108 (R. DRIVE), RV3110 (B. DRIVE) for best white balance.
12) Repeat the above steps 8) throught 11) two or three times.

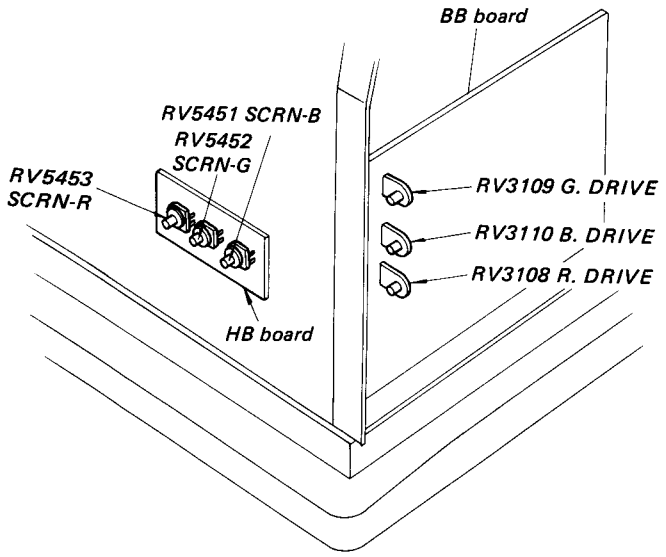


Fig. 3-45

SECTION 4
CIRCUIT ADJUSTMENTS

Note:

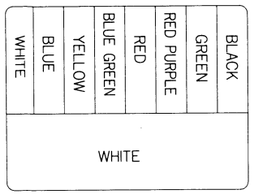
(1) TEST EQUIPMENT REQUIRED

1. Oscilloscope
2. Voltmeter (VOM)
3. Digital multimeter
4. Color-bar/pattern generator
5. Video tuner
6. Variable auto-transformer

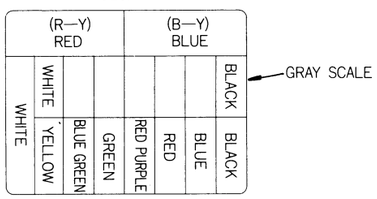
(2) INPUT SIGNAL

These adjustments were performed with the following color-bar signal inputs.

PAL



SECAM



NTSC 4.43

(3) CONTROL AND SWITCH SETTINGS

Controls and switches should be set as follows when making checks and adjustments unless otherwise noted.

PICTURE control ..... 4/5 (80%) turns clockwise
BRIGHT control
COLOR control } ..... mechanical-mid
HUE control
HATCH switch ..... NORMAL

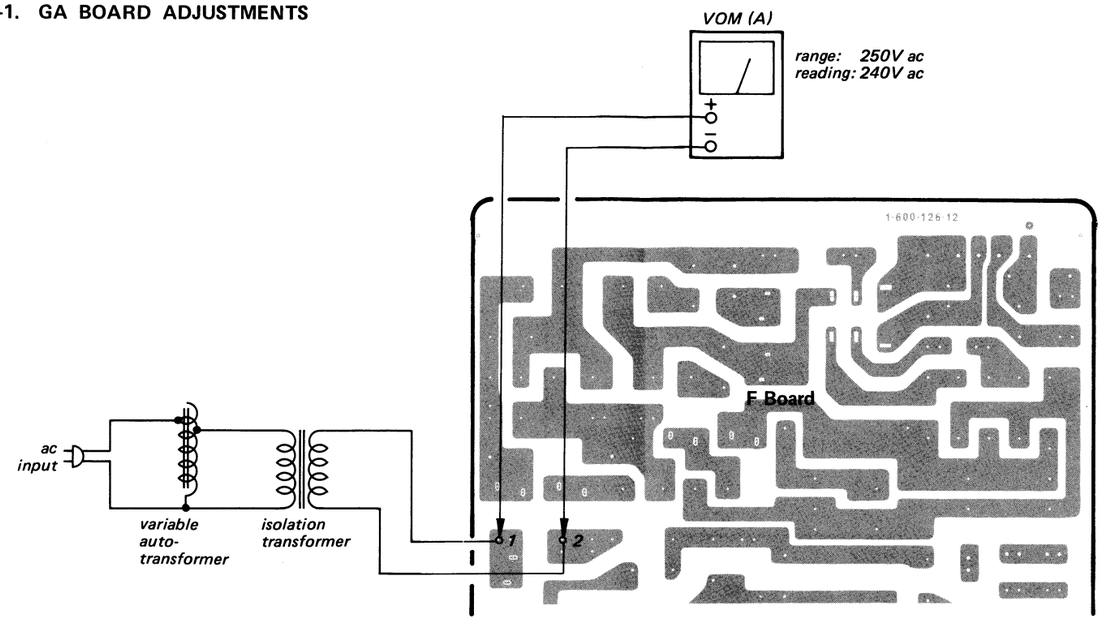
(4) CIRCUIT ADJUSTMENTS

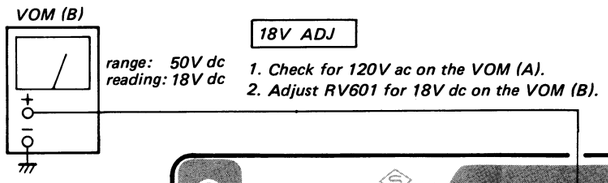
Adjustment	Circuit Board	Page
18V ADJUSTMENT R614/R615 ADJUSTMENT	GA	25, 26
H. HOLD R6211/R6212 ADJUSTMENT R6207/R6208 ADJUSTMENT	GB	27, 28
OSC KILLER ACC BELL FILTER BKG 1H DELAY TOT 4.43MHz TRAP 4.25MHz TRAP	BB	29 — 31

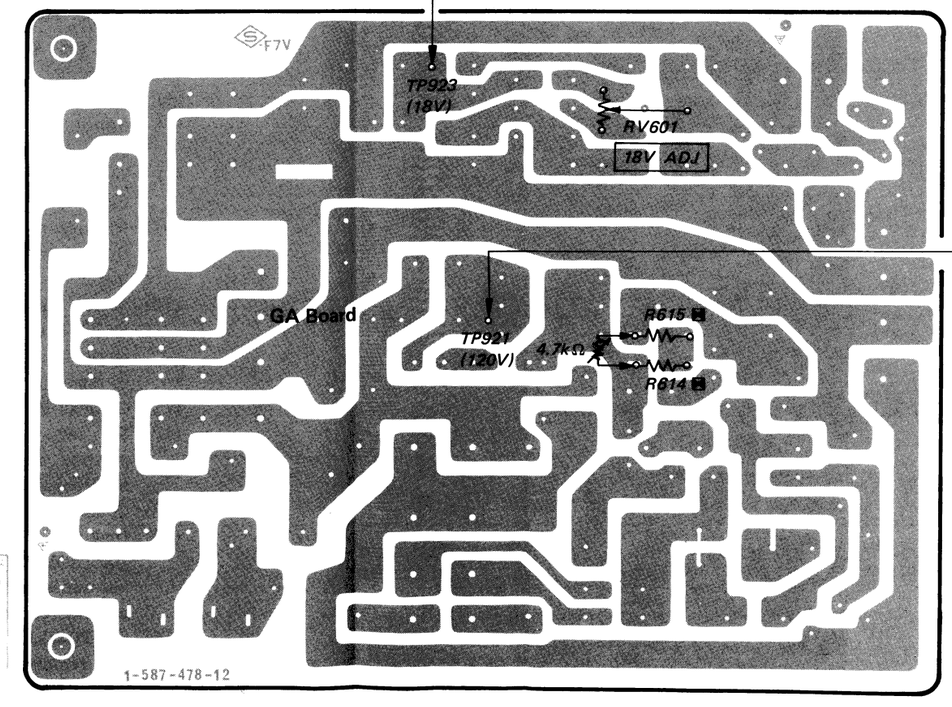
Adjustment	Circuit Board	Page
CW PHASE DC BALANC ADJ OF CHROMA AMP SECAM ID R-Y DISCRI LEVEL B-Y DISCRI MINATOR R-Y DISCRIMINATOR	BB	32 — 33

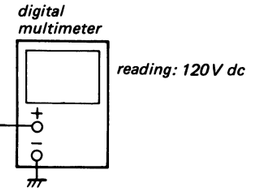
(5) These adjustments should be performed with the rated power supply voltage unless otherwise noted.

4-1. GA BOARD ADJUSTMENTS







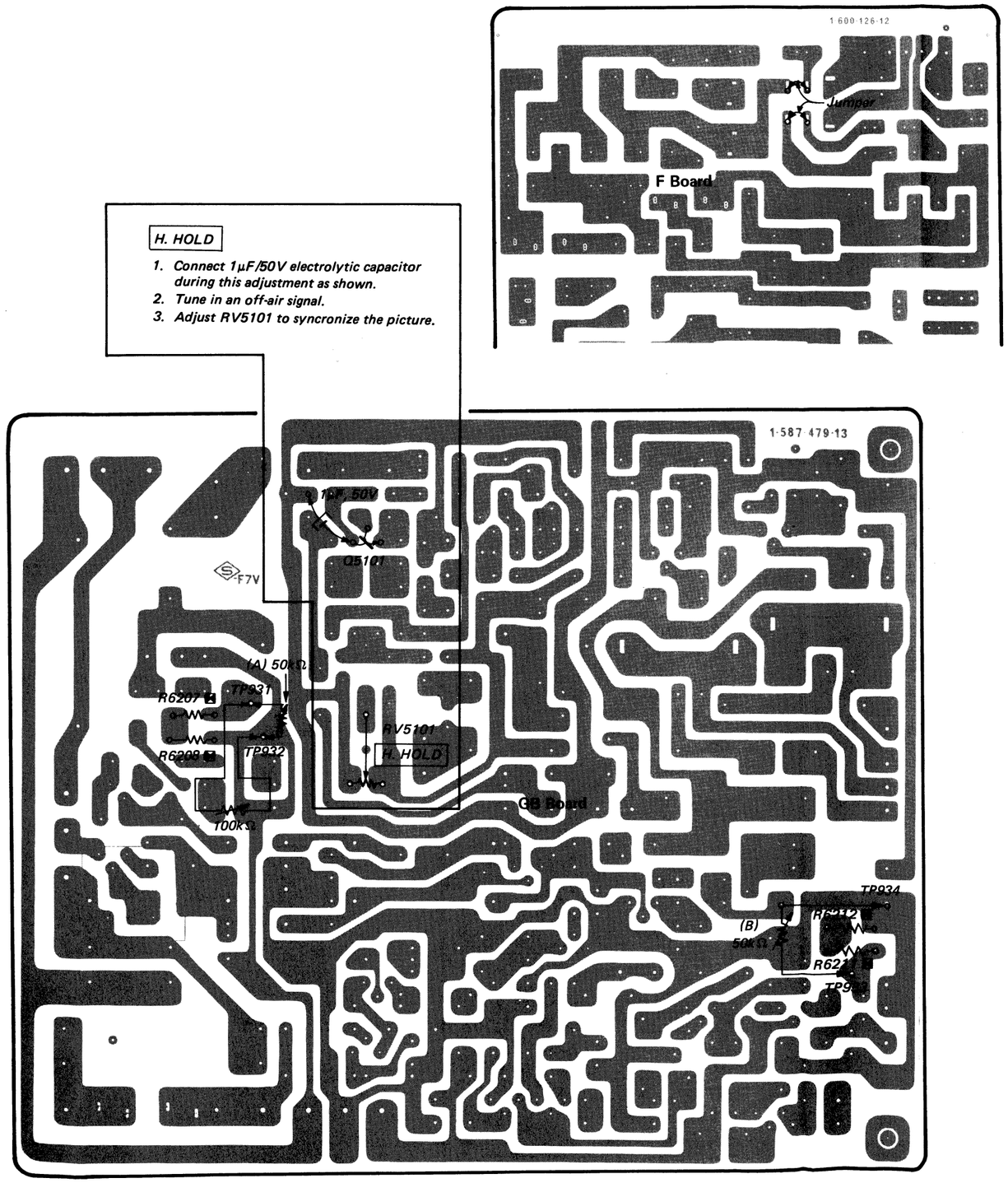


R614/R615 ADJUSTMENT

When replacing the following components, make this adjustment.
D602, R611, R612, R613, R614, R615 } ..... GA board

(1) Connect a digital multimeter between TP921 and ground on the GA board.
(2) Set voltage selector (S6103) to 240V position and connect variable auto-transformer as shown.
Adjust the variable auto-transformer for 240V ac on VOM (A).
(3) Set the POWER switch to ON.
(4) Check for 119—121V dc on the digital multimeter. If necessary, proceed to the step (5) through (10).
(5) Remove R614 and R615, and connect a 4.7kΩ variable resistor instead of them.
(6) Adjust the variable resistor for 120V dc on the digital multimeter.
(7) Set the POWER switch to OFF.
(8) Remove the variable resistor and measure the resistance value of it with the digital multimeter.
(9) Select the resistance values of R614 and R615 (carbon type, ¼W) so that sum of series resistance value of R614 and R615 is equal to the value of in step (8).
(10) Set the POWER switch to ON, and check for 119—121V dc on the digital multimeter.

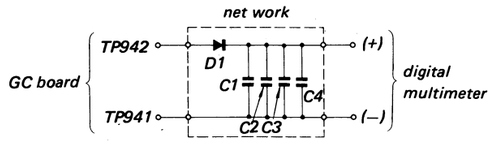
4-2. GB BOARD ADJUSTMENTS



R6211/R6212 ADJUSTMENT

Note: Befor starting this adjustment, set the voltage selector (S6103) to 240V position and adjust the variable auto-transformer for 240V ac on VOM (A).

(1) Make the floowing network and connect a digital multimeter as shown below.



Diode (D1): SB2B
Capacitors (C1–C4): 16,000pF/1.5kV polyethylene (1-129-924-00)
Digital multimeter: Capable of measuring the voltages of more than 1,000V

(2) Turn the BRIGHT and PICTURE controls fully clockwise.
(3) Feed in the white pattern from color-bar/ pattern generater.
(4) Remove R6207 and connect a 50kΩ variable resistor (A) between the test points TP931 and TP932 on the GB board.
Set the variable resistor (A) to maximum position.
(5) Remove R6211 and R6212, and connect a 50kΩ variable resistor (B) between the test points TP933 and TP934 on the GB board. Set the variable resistor (B) to minimum position.
(6) Set the POWER switch to ON.
(7) Adjust the variable resistor (A) for 523–525V dc on the digital multimeter.
(8) Set the variable resistor (B) to the point where the POWER is automatically turned OFF.
(9) Remove the variable resistor (B) and measure the resistance value of it with the digital multimeter.
(10) Select the resistance values of R6211 and R6212 (carbon type, ¼W) so that sum of series resistance value of R6211 and R6212 is equal to the value in step (9).
(11) Connect R6211 and R6212.
(12) Set the variable resistor (A) to maximum position, and set the POWER switch (S6101) to ON again.
(13) Connect two jumpers.
(14) Decrease the value of variable resistor (A) and make sure that the picture begins to become unstable at 519–529V dc on the digital multimeter.
(15) Set POWER switch to OFF. Connect R6207 and remove the variable resistor (A), the network and digital multimeter.

When replacing the following components, adjust R6211/R6212 and R6207/R6208 as described below.

DC851 (HV block)	
T801 (FBT-1), T802 (FBT-2)	
R807, R808, R810	HV block
Q6204, Q6205, D6207, R6207 R6208, R6210, R6211, R6212	GB board
C802, C803, C804, C805	GC board

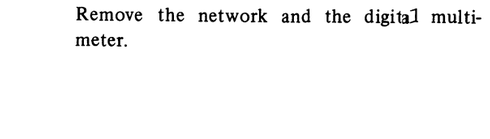
R6207/R6208 ADJUSTMENT

When replacing the following components, make this adjustment.

R805, R806, R809	HV block
Q6201, Q6202, Q6203, Q6214 D6201, R6206, R6237	GB board

(1) Make the following network and connect a digital multimeter as shown below.

Note: Befor starting this adjustment, set the voltage selector (S6103) to 240V position and adjust the variable auto-transformer for 240V ac on VOM (A).



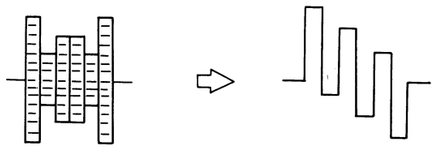
Diode (D1): SB2B
Capacitors (C1–C4): 16,000pF/1.5kV polyethylene (1-129-924-00)
Digital multimeter: Capable of measuring the voltage of more than 1,000V

(2) Turn the BRIGHT and PICTURE controls fully clockwise.
(3) Feed in the white pattern from color-bar/ pattern generator.
(4) Remove R6207 and R6208, and connect a 100kΩ variable resistor between test points TP931 and TP932 on the GB board.
Set the variable resistor to maximum position.
(5) Set the POWER switch to ON, and adjust the variable resistor for 483–485V dc on the digital multimeter.
(6) Set the POWER switch to OFF.
(7) Remove the variable resistor and measure the resistance value of it with the digital multimeter.
(8) Select the resistance value of R6207 and R6208 (carbon type, ¼W) so that sum of series resistance value of R6207 and R6208 is equal to the value in step (7).
(9) Connect the resistor R6207 and R6208.
(10) Set the POWER switch to ON and make sure that the digital multimeter indicates 479–489V dc.
(11) Set the POWER switch to OFF.
Remove the network and the digital multimeter.

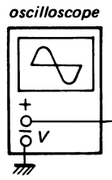
4-3. BB BOARD ADJUSTMENTS

OSC

1. Feed in a PAL color-bar signal.
2. Connect an electrolytic capacitor (10µF/16V) as shown during this adjustment.
3. Connect the oscilloscope to the terminal 8 of IC3104.
4. Adjust CV3101 for stable waveform on oscilloscope as shown.



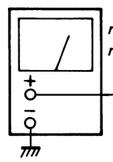
oscilloscope



KILLER

1. Feed in a PAL color-bar signal.
2. Connect an electrolytic capacitor (10µF/16V) as shown during this adjustment.
3. Adjust RV3105 for 4V dc on VOM.

VOM



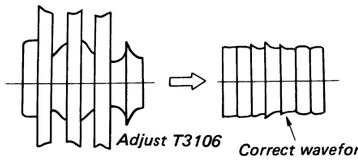
range: 5V dc
reading: 4V dc

ACC

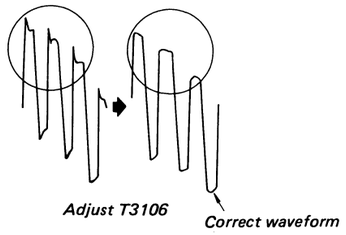
1. Turn in a strong off-air signal.
2. Set PICTURE control to 4/5 (80%) turns clockwise.
3. Set COLOUR control to mechanical center.
4. Adjust RV3106 for suitable color intensity.

BELL FILTER

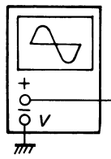
1. Feed in a SECAM color-bar signal.
2. Connect an oscilloscope to the terminal 3 of IC3101.
3. Adjust T3106 to obtain a correct waveform.



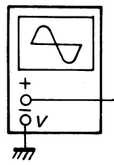
4. Connect an oscilloscope to the terminal 8 of IC3104.
5. Adjust T3106 to obtain a correct waveform.

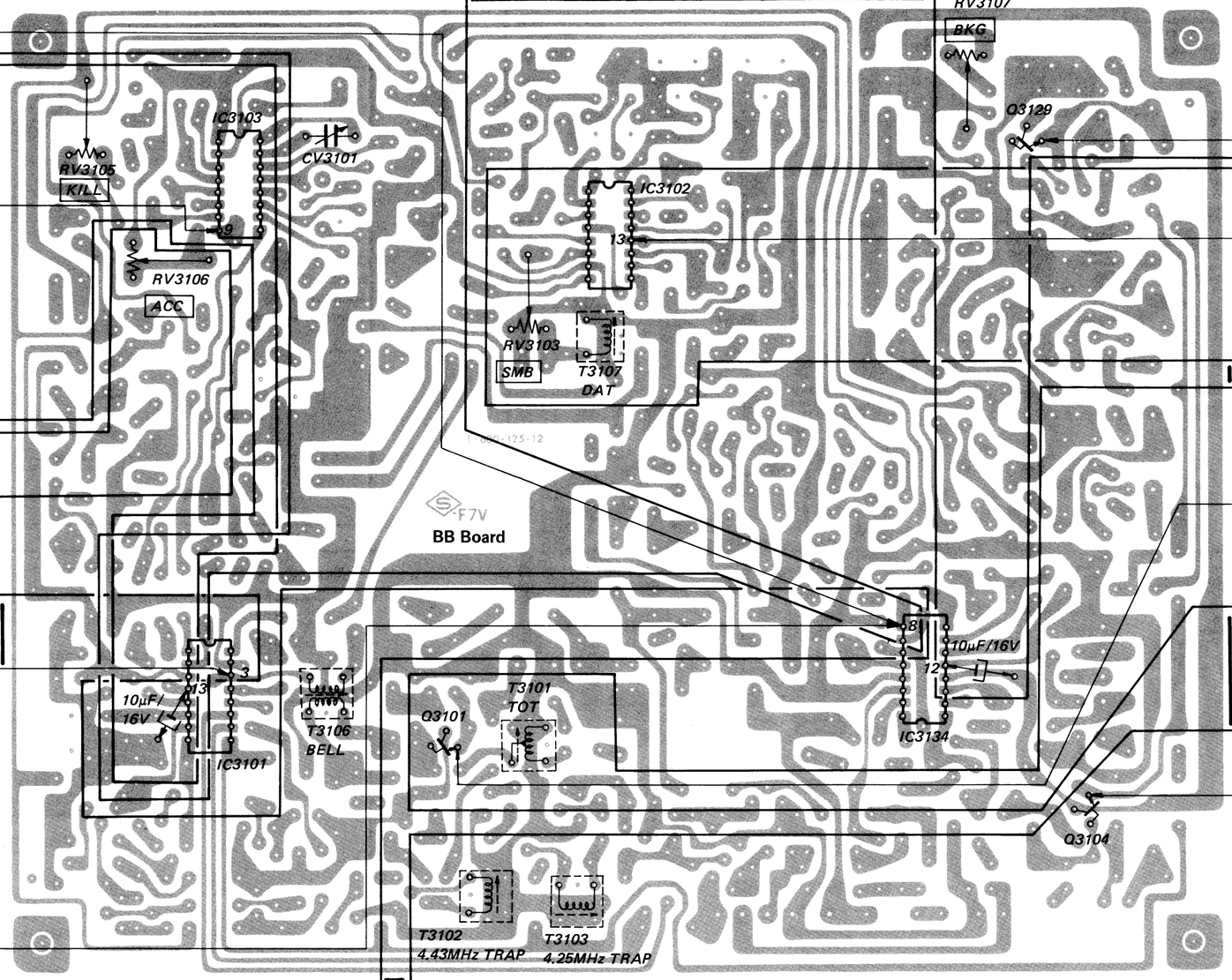


oscilloscope

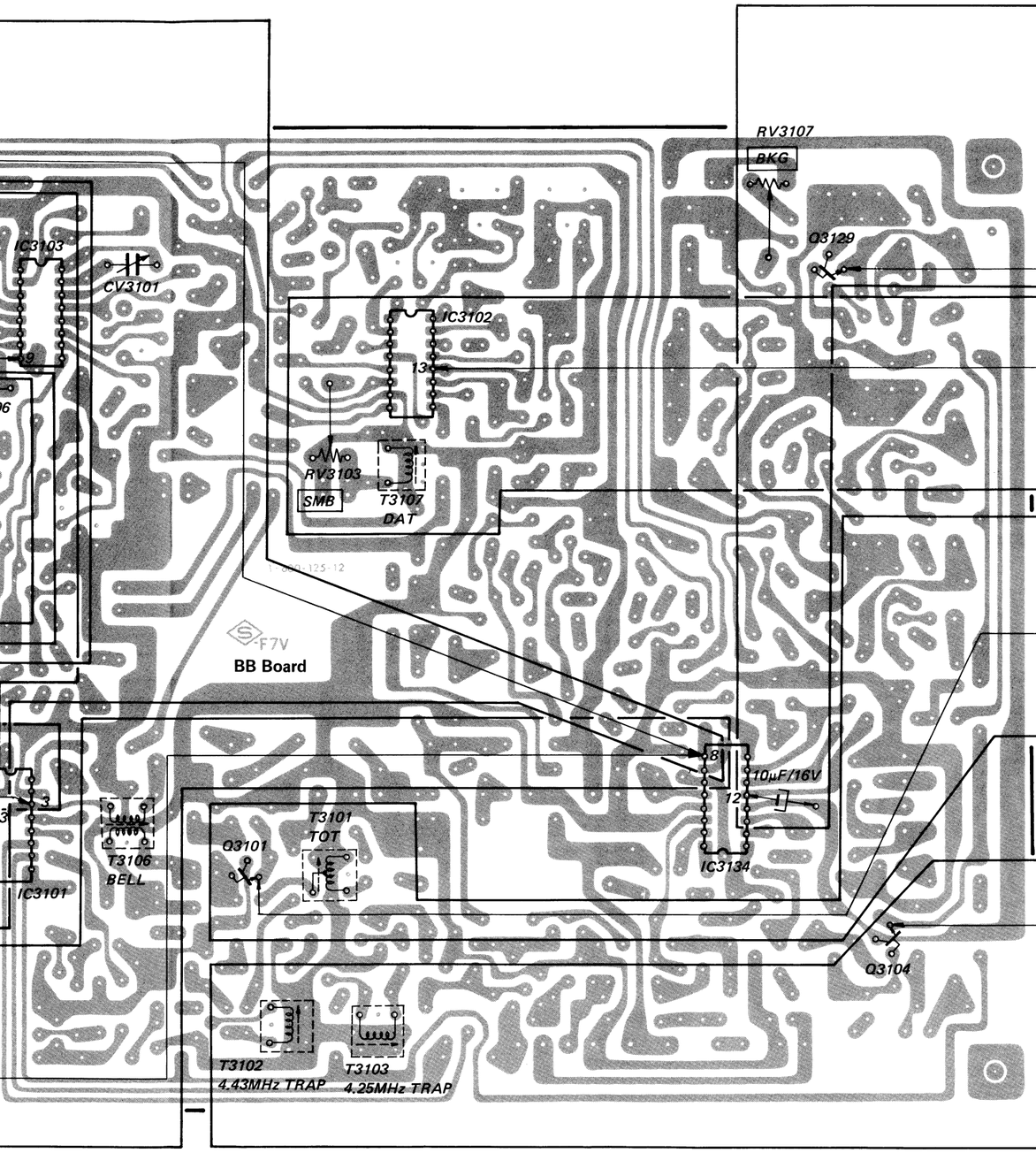


oscilloscope





SCC-208A-B/SCC-209A-B KP-5010PS/7210PS



BKG

VOM

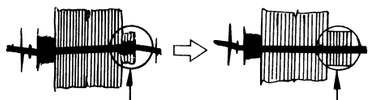
range: 50V dc
reading: 6.4V dc

1. Feed in a PAL color-bar signal.
2. Connect an electrolytic capacitor (10µF/16V) as as shown during this adjustment.
3. Adjust RV3107 for 6.4V dc on VOM.

1H DELAY

oscilloscope

1. Feed in a PAL color-bar signal.
2. Connect an oscilloscope to the terminal 13 of IC3102.
3. Adjust RV3103 and T3107 for correct waveform as shown.

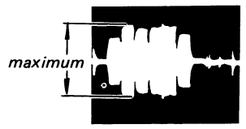


Adjust RV3103 and T3107. Correct waveform.

TOT

oscilloscope

1. Feed in a PAL color-bar signal.
2. Adjust T3101 to maximize the waveform.



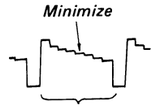
4.43MHz TRAP

oscilloscope

1. Feed in a PAL color-bar signal.
2. Turn COLOUR control fully counterclockwise.
3. Adjust T3102 to minimize the 4.43MHz components.

4.25MHz TRAP

1. Feed in SECAM color-bar signal.
2. Turn COLOUR control fully counterclockwise.
3. Adjust T3103 to minimize the 4.25MHz components.



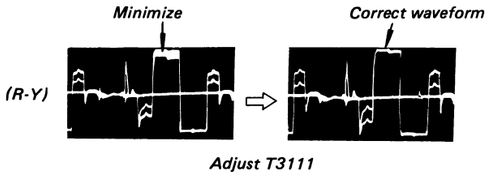
T3102 and T3103

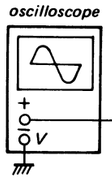
SCC-208A-B/SCC-209A-B KP-5010PS/7210PS KP-5010

4-4. BB ADJUSTMENTS

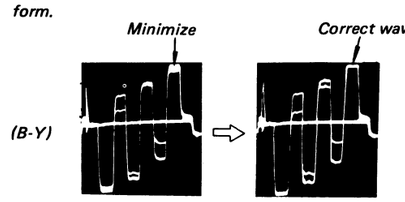
CW PHASE

1. Feed in a PAL color-bar signal.
2. Connect an oscilloscope to the terminal 9 of IC3104.
3. Adjust T3111 to obtain a correct waveform.



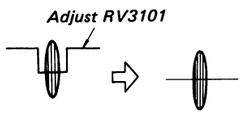


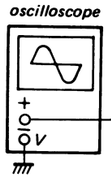
4. Connect an oscilloscope to the terminal 8 of IC3104.
5. Adjust RV3104 to obtain a correct waveform.



DC BALANCE ADJ OF CHROMA AMP

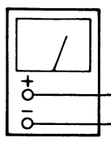
1. Feed in a PAL color-bar signal.
2. Adjust RV3101 to obtain a correct waveform.

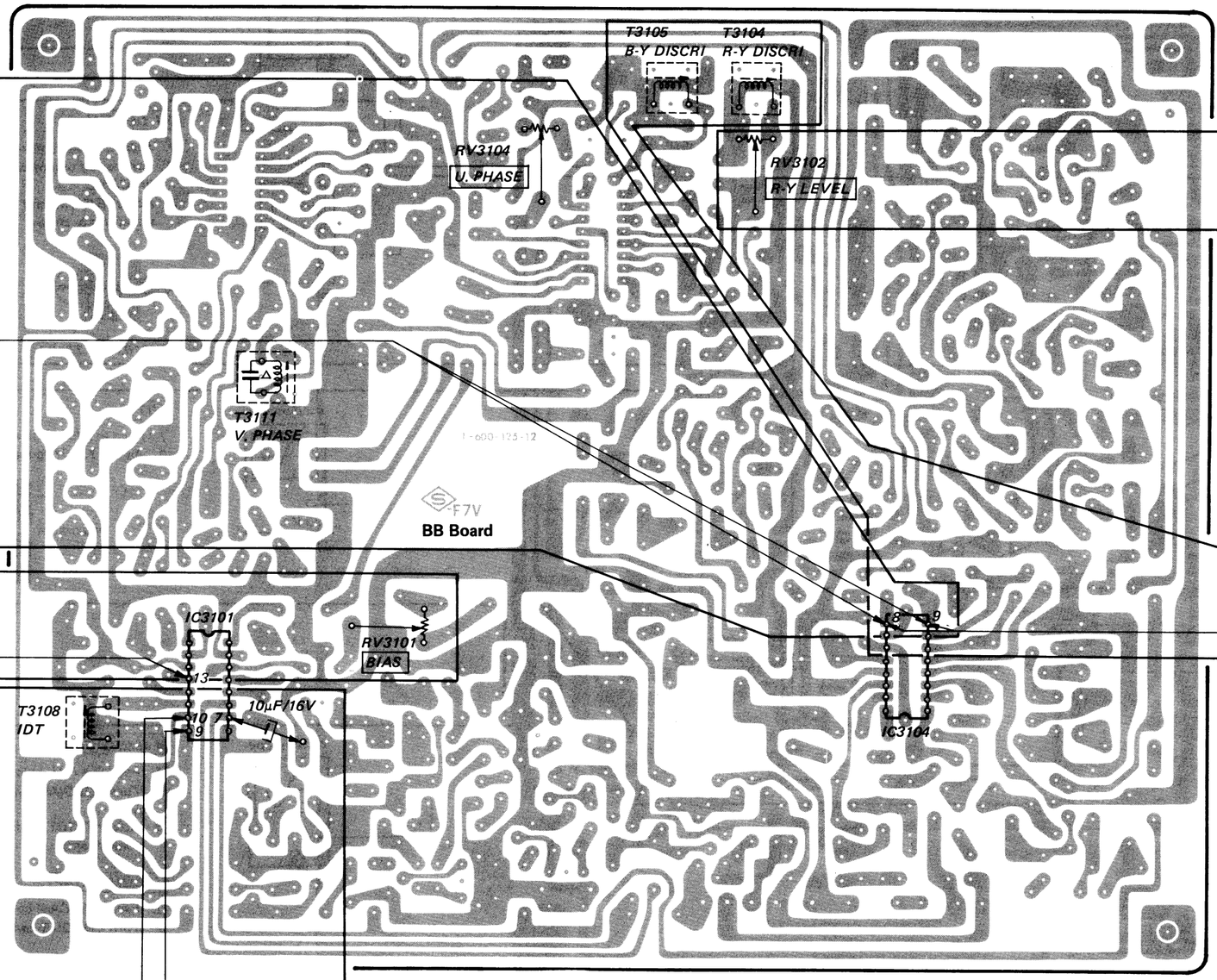




SECAM ID

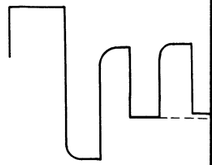
1. Feed in a SECAM color-bar signal.
2. Connect an electrolytic capacitor (10μF/16V) as shown during this adjustment.
3. Adjust T3108 for maximum voltage on the VOM.



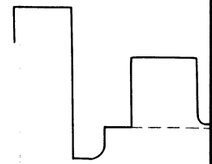


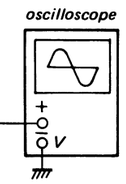
R-Y DISCRI LEVEL

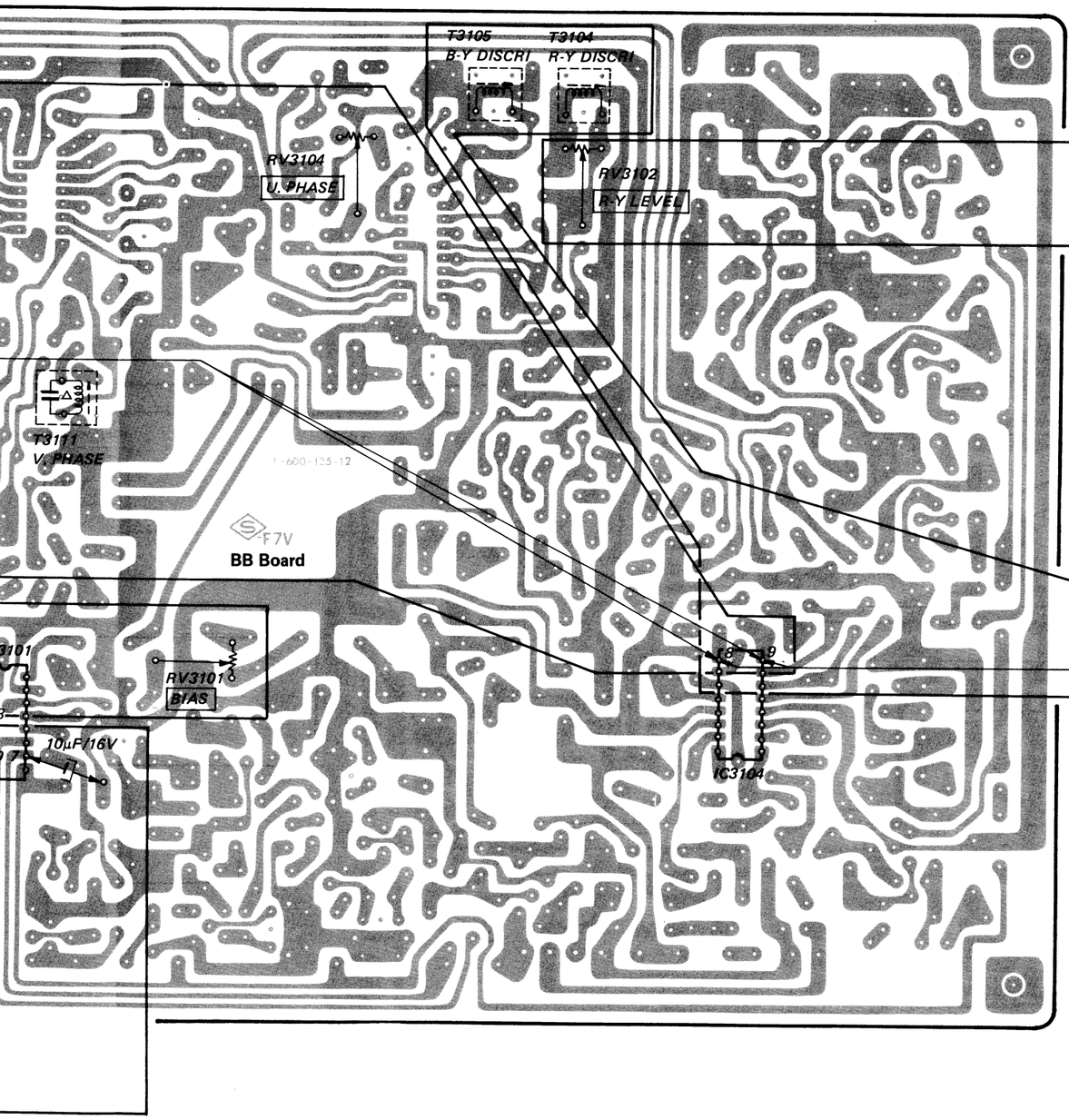
1. Feed in a SECAM color-b
2. Connect an osilloscope to CB board.
3. Adjust COLOUR control obtain the correct wavefo



4. Connect an osilloscope to board.
5. Adjust RV3102 to obtain waveform as shown.

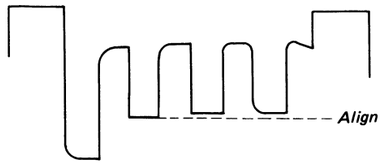






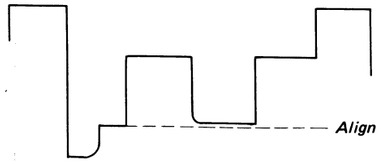
R-Y DISCRI LEVEL

1. *Feed in a SECAM color-bar signal.*
2. *Connect an osilloscope to the pin 9 on CB board.*
3. *Adjust COLOUR control (RV9203) to obtain the correct waveform as shown.*

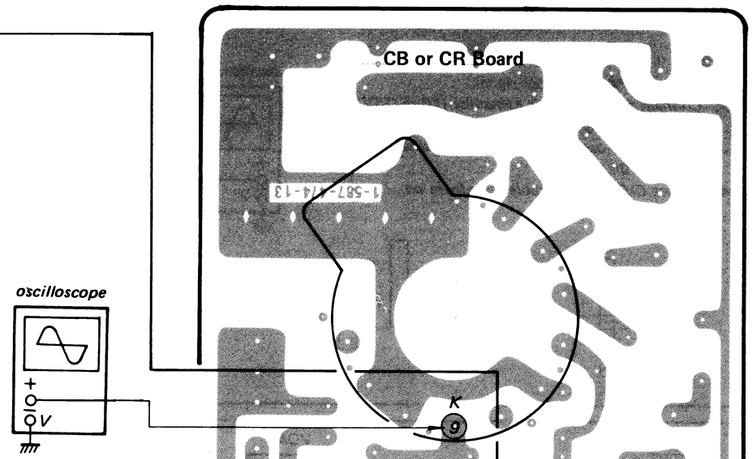


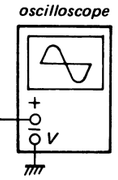
BLUE

4. *Connect an osilloscope to the pin 9 on CR board.*
5. *Adjust RV3102 to obtain the correct waveform as shown.*



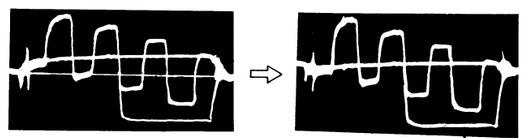
RED





B-Y DISCRIMINATOR

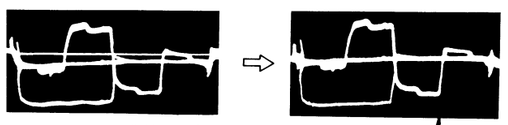
1. *Feed in a SECAM color-bar signal.*
2. *Connect an oscilloscope to the terminal 8 of IC3104.*
3. *Adjust T3105 to obtain a correct waveform as show.*



Adjust T3105 *Correct waveform*

R-Y DISCRIMINATOR

1. *Feed in a SECAM color-bar signal.*
2. *Connect an oscilloscope to the terminal 9 of IC3104.*
3. *Adjust T3104 to obtain a correct waveform as shown.*

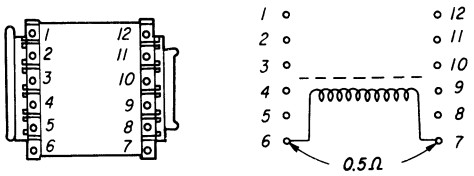


Adjust T3104 *Correct waveform*

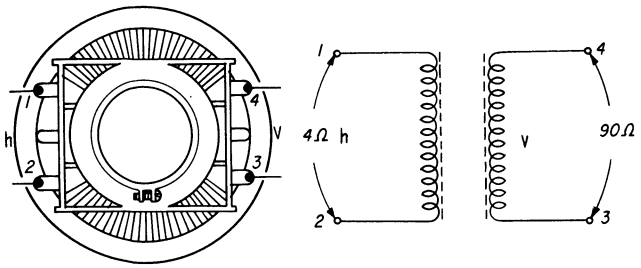
SECTION 5
DIAGRAMS

5-1. DC RESISTANCE AND WINDING DIAGRAMS OF COILS AND TRANSFORMERS

L801
HCA

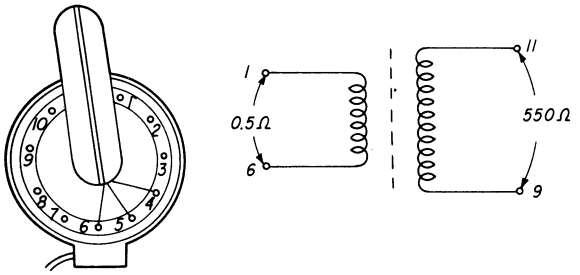


L5502 DY <R>
L5503 DY <G>
L5504 DY <B>

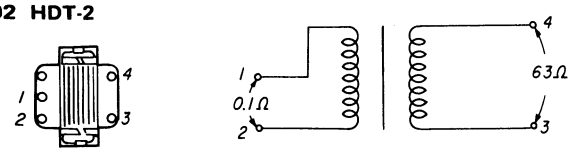


L5507 NECK ASS'Y <G>
L5508 NECK ASS'Y <R>
L5509 NECK ASS'Y <B>

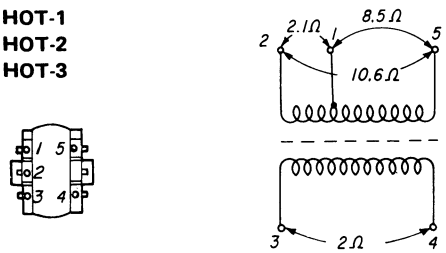
T801 FBT-1
T802 FBT-2



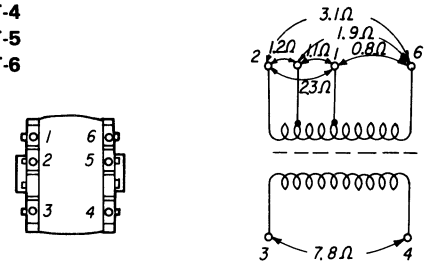
T5101 HDT-1
T5102 HDT-2



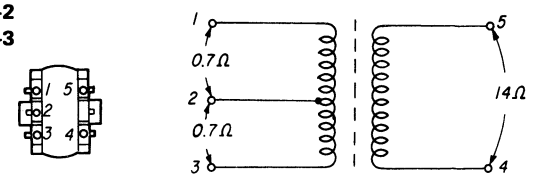
T5301 HOT-1
T5304 HOT-2
T5307 HOT-3



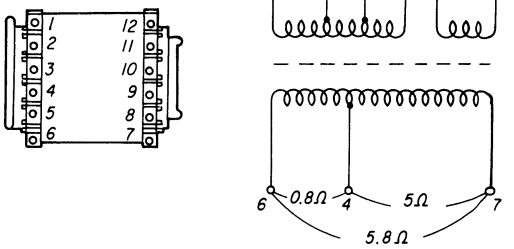
T5302 HOT-4
T5305 HOT-5
T5308 HOT-6



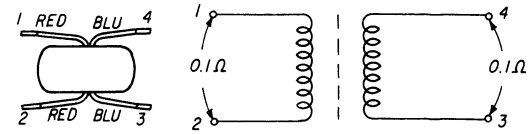
T5303 LOT-1
T5306 LOT-2
T5309 LOT-3



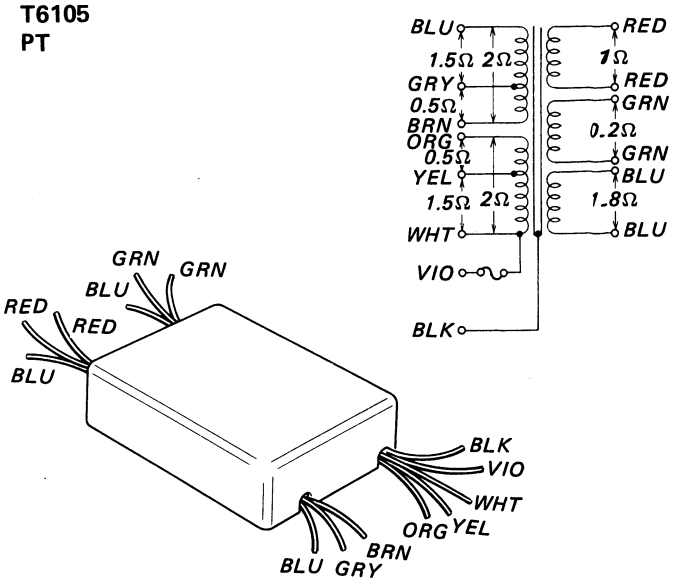
T5310
LOT-4



T6101 LFT-1
T6102 LFT-2
T6103 LFT-3
T6104 LFT-4



T6105
PT

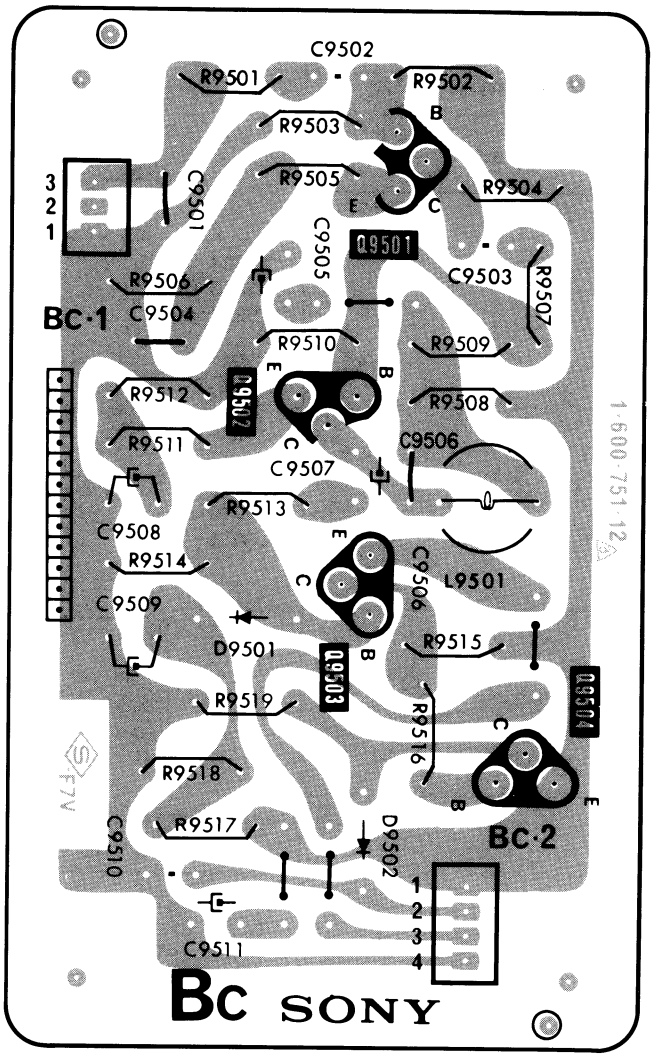


- DC resistance measurements shown with coils and transformers disconnected from circuit.

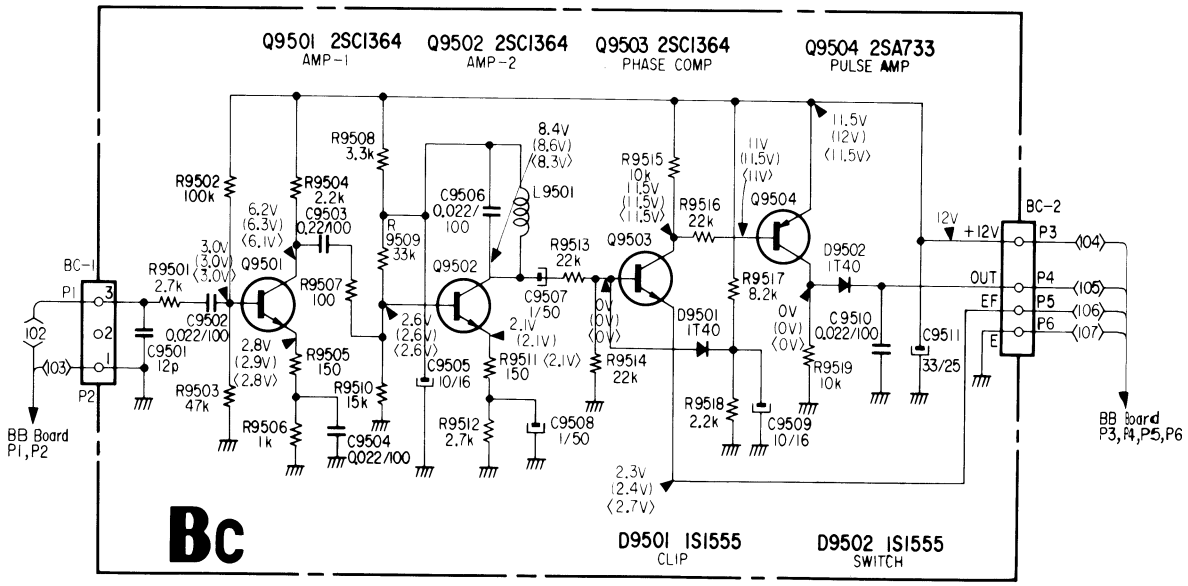
5-2. MOUNTING AND SCHEMATIC DIAGRAMS

Note: All mounting diagrams shown on the conductor side.

MOUNTING DIAGRAM
— BC Board —



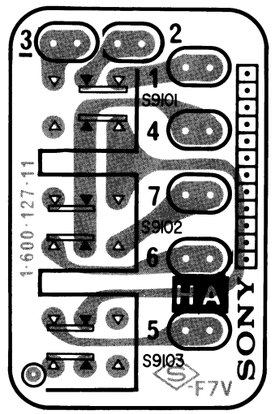
SCHEMATIC DIAGRAM
— BC Board —



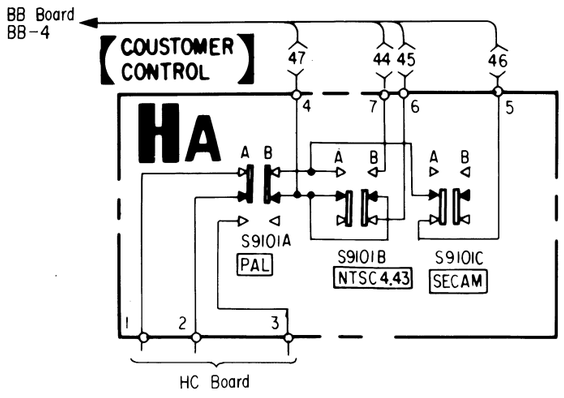
KP-5010PS/7210PS SCC-208A-B/SCC-209A-B

COUSTOMER CONTROL **HA** **HB** [SCRN VOL]

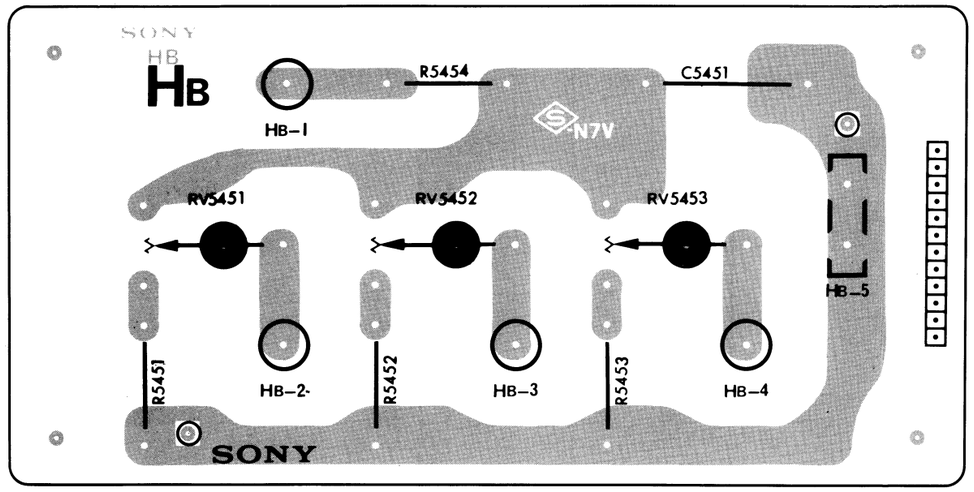
MOUNTING DIAGRAM
– HA Board –



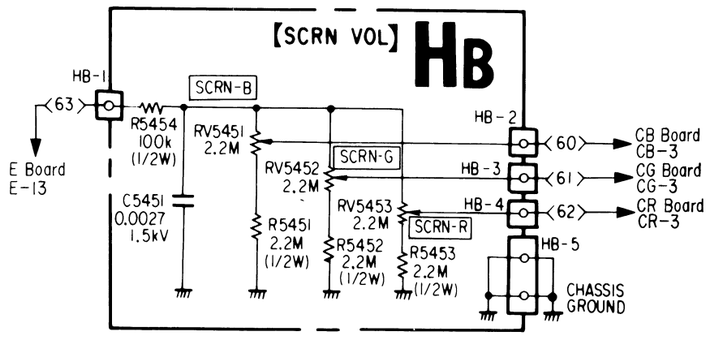
SCHEMATIC DIAGRAM
– HA Board –



MOUNTING DIAGRAM
– HB Board –



SCHEMATIC DIAGRAM
– HB Board –

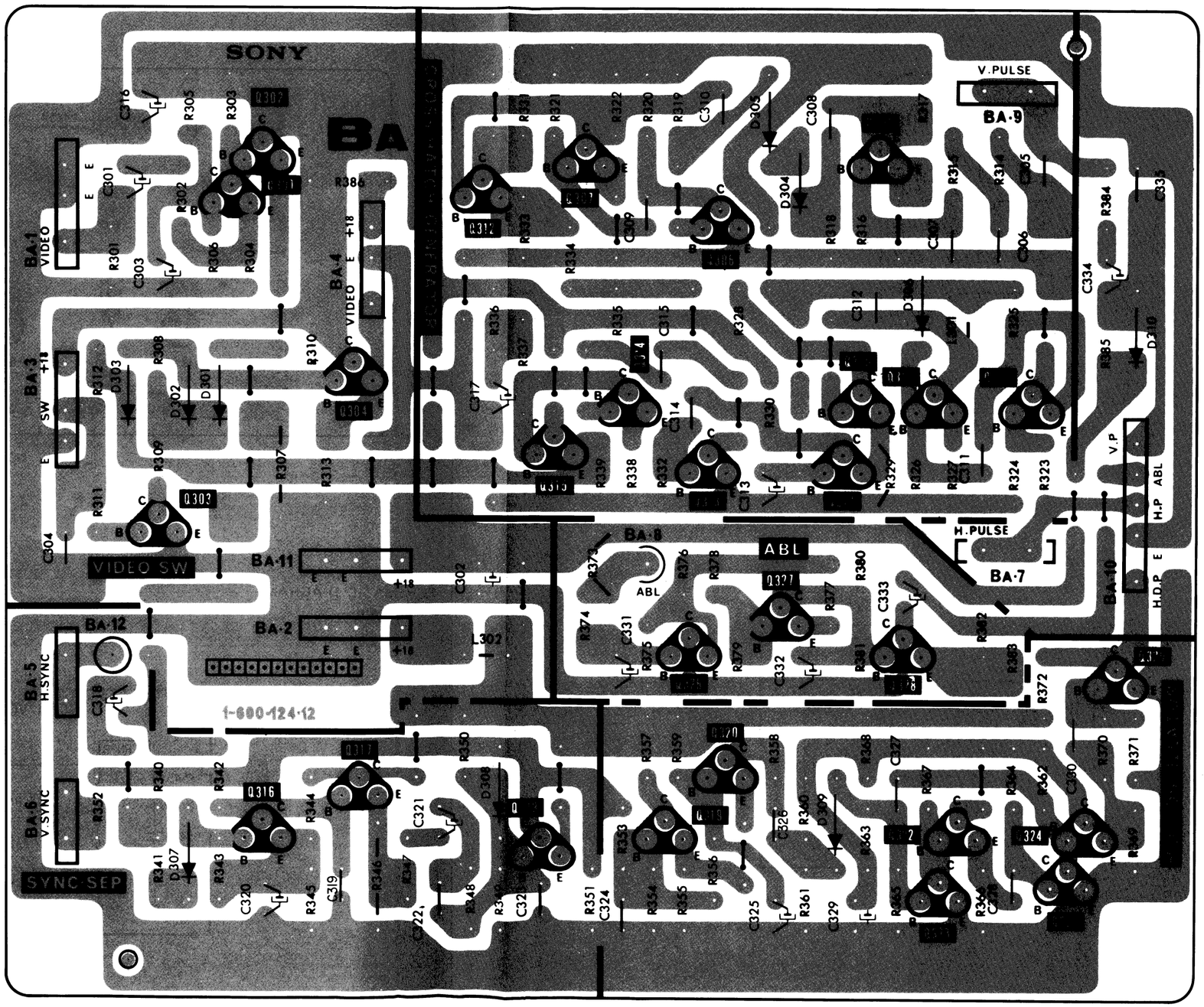


VIDEO AMP, SYNC SEP
HATCH OSC/AMP, ABL, H·D·P

BA BA

MOUNTING DIAGRAM
— BA Board —

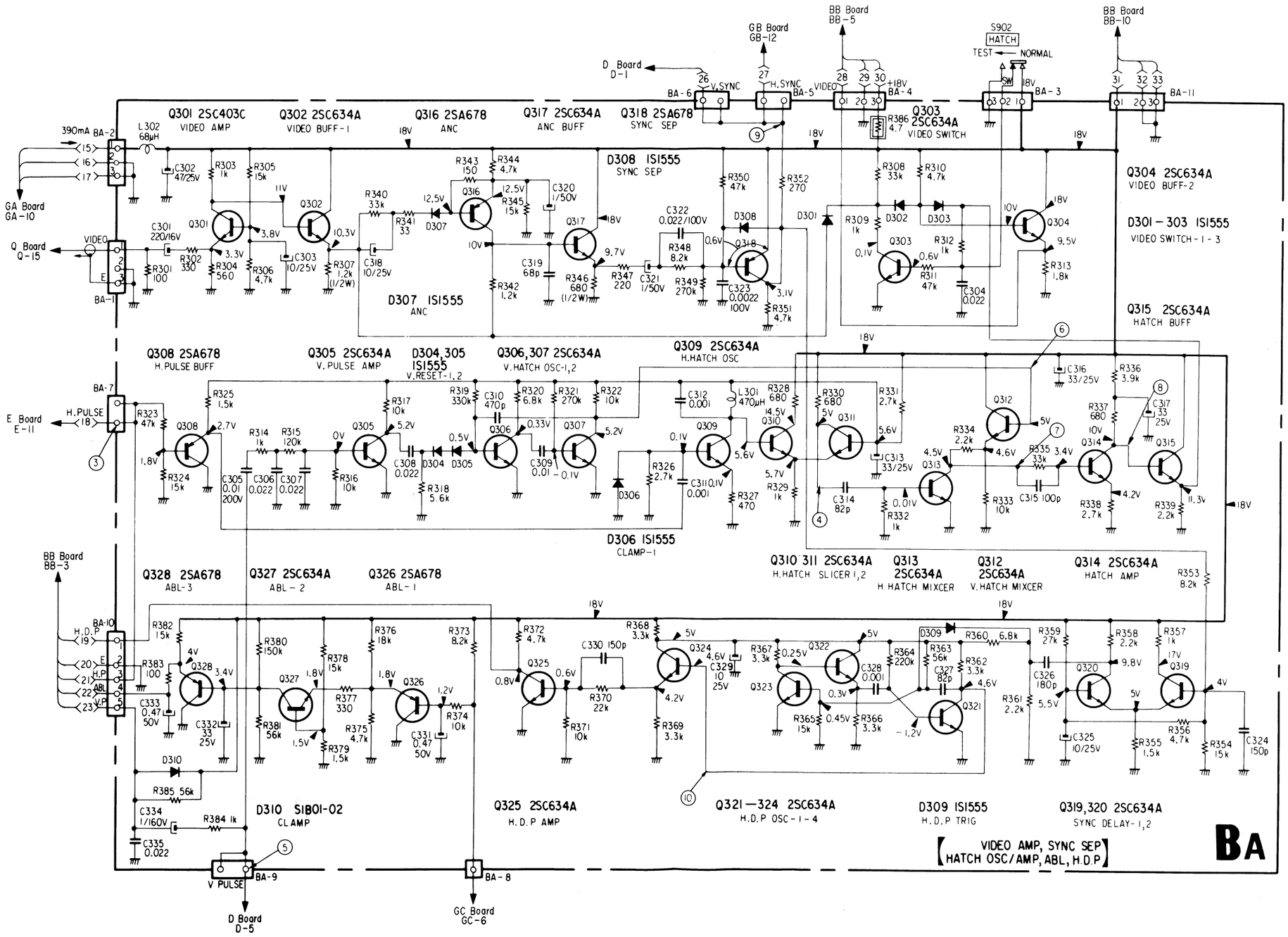
IC, Q	D
	305
302 307,305	
301,312 306	304
	306
	310
304 314,310 309,308	303 302 301
315 313,311	
303	
327	
326,328	
325	
320	
317	
316 319 322,324 318	308 309 307
323,321	



BA BA

VIDEO AMP, SYNC SEP
HATCH OSC/AMP, ABL, H·D·P

SCHEMATIC DIAGRAM
– BA Board –



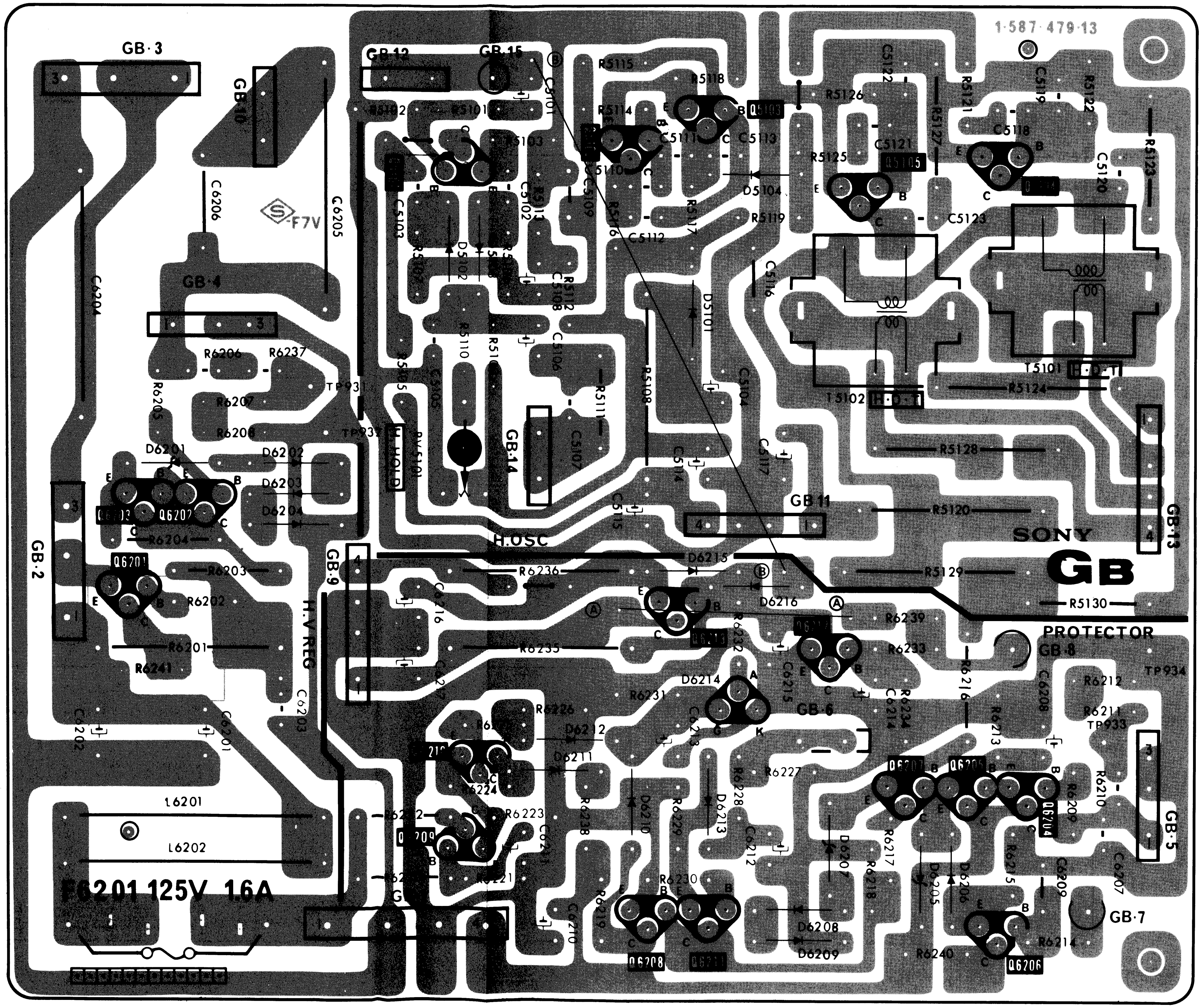
[H. OSC, H. DRIVE HV. REG, PROTECT] **GB** **GB**

A B C D E F G

1 2 3 4 5

MOUNTING DIAGRAM
— GB Board —

IC, Q	D
5103	
5102	
5101 5104	5104
5105	
	5102,5103
	5101
	6201,6202
6203,6202	6203
	6204
	6215
6201	6216
6213	
6212	
	6214
	6212
6210	
6207	6211
6205	
6204	6210,6213
6209	
	6207
	6205,6206
6208,6211	6208
6206	
	6209
IC, Q	D

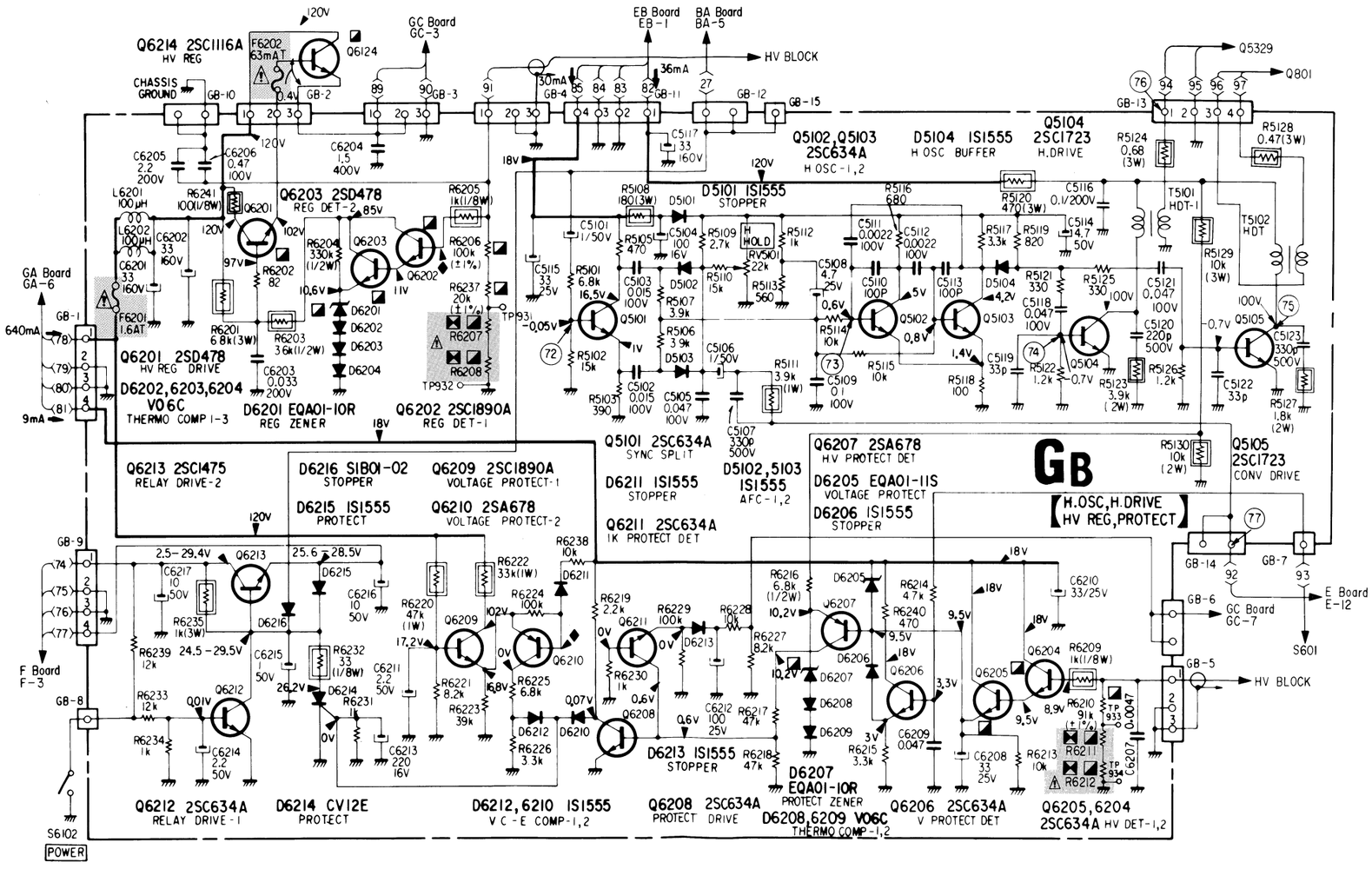


GB GB [H. OSC, H. DRIVE HV. REG, PROTECT]

A B C D E F G

1 2 3 4 5

SCHEMATIC DIAGRAM
– GB Board –



Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

CHROMA, Y AMP, SYSTEM SW
KILLER SW, APC, CW AMP
R·G·B OUT, 12V REG

BB **BB**

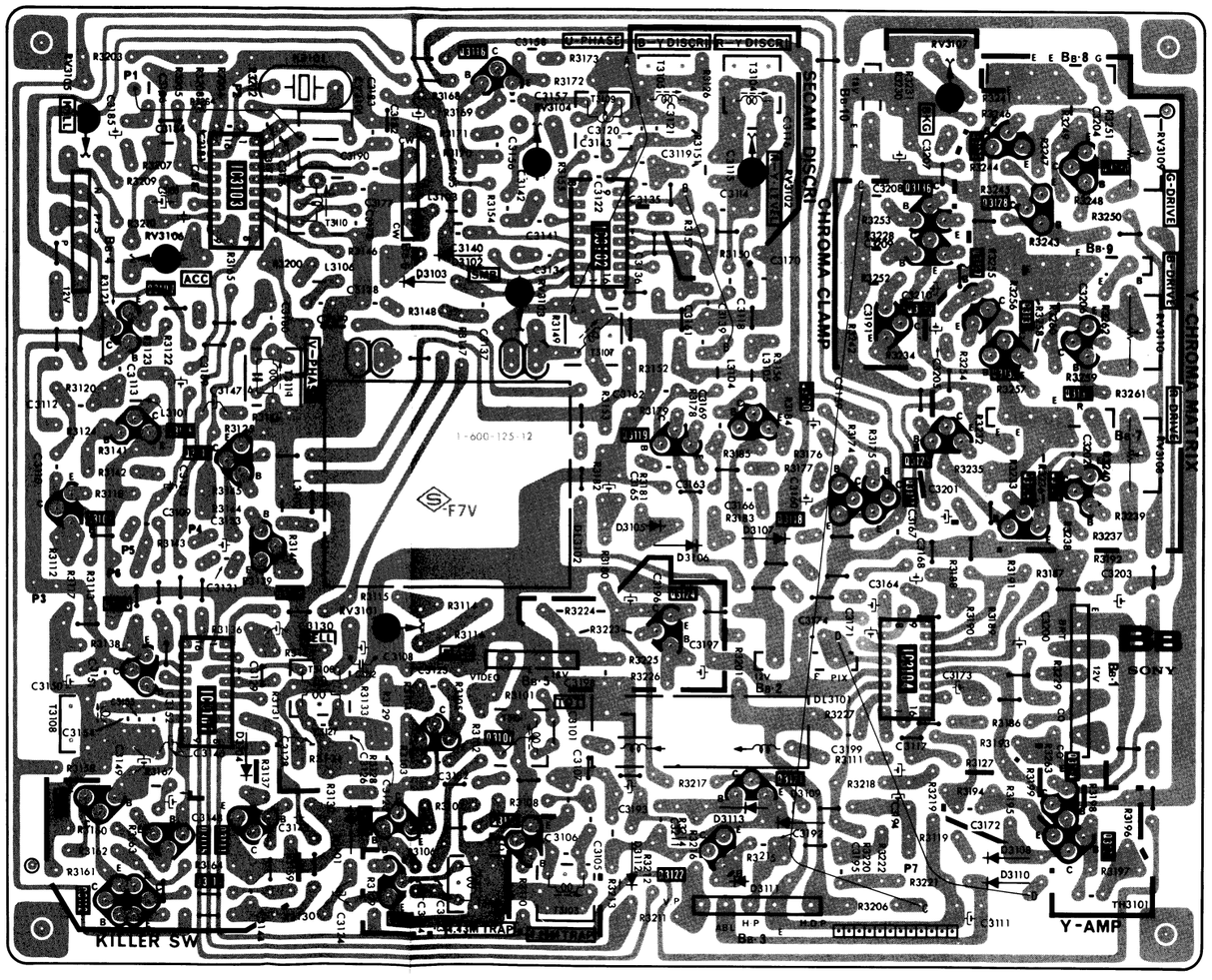
A B C D E F G

1 2 3 4 5

MOUNTING DIAGRAM
– BB Board –

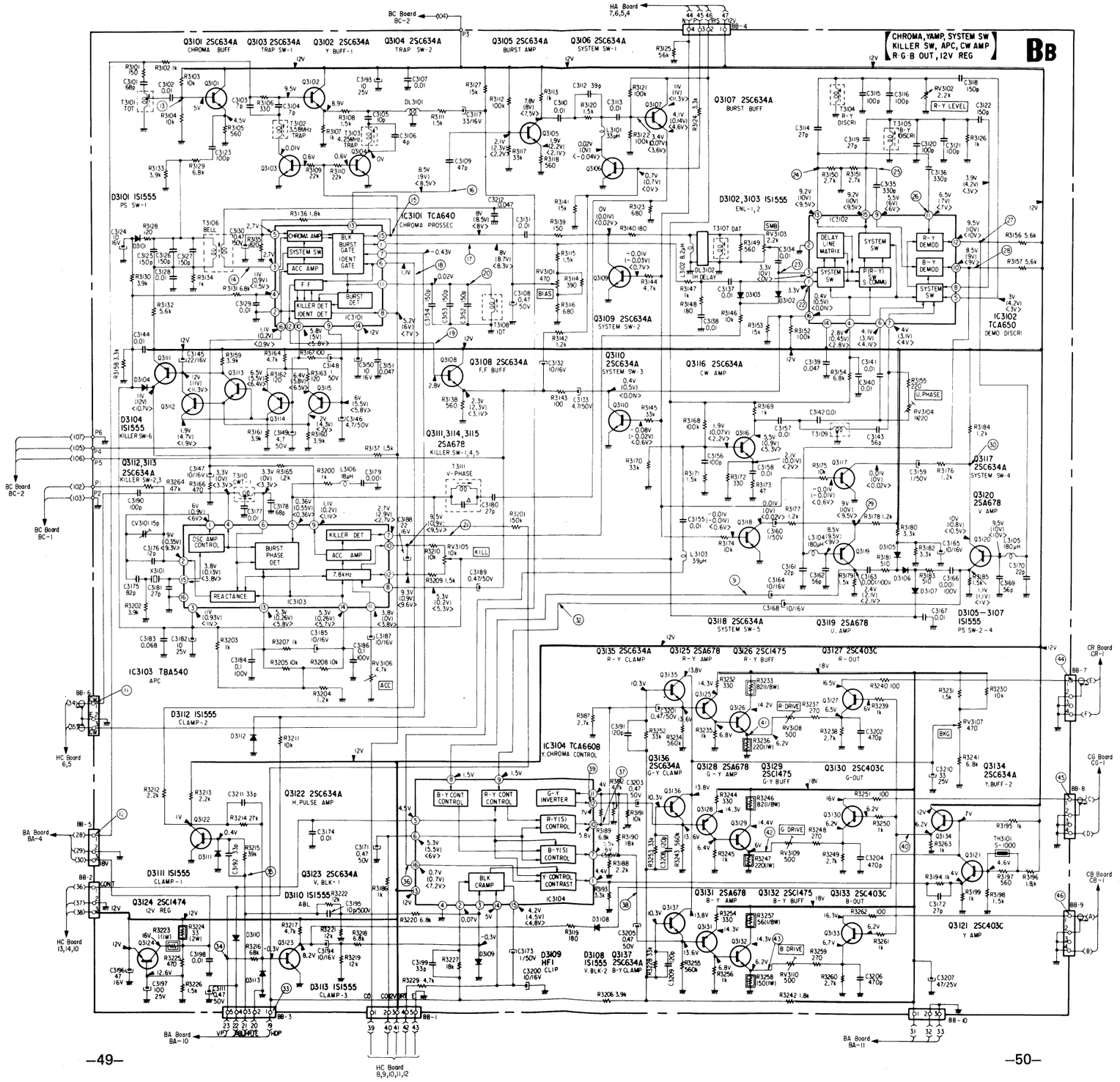
IC , Q	D	ADJ
3116		RV3107
		RV3105
		RV3109
3129		
3130		RV3104 RV3102
3128 3136		
3137	3102	RV3106
	3103	RV3103
3135,3131 3107 3133 3132		RV3110
3120 3106 3119,3125		
3110		RV3108
3127 3118,3117 3105 3126		
	3105 3107 3106	
3109		
3124		RV3101
3108		
IC3101		
3101		
	3104	
3123 3134		
3114	3113	
3111,3102	3101 3109	
3104 3121 3115 3122		
	3108	
3103	3112,3110	
3112,3113	3111	

IC , Q | D | ADJ



BB **BB** CHROMA, Y AMP, SYSTEM SW
KILLER SW, APC, CW AMP
R·G·B OUT, 12V REG

SCHEMATIC DIAGRAM
— BB Board —

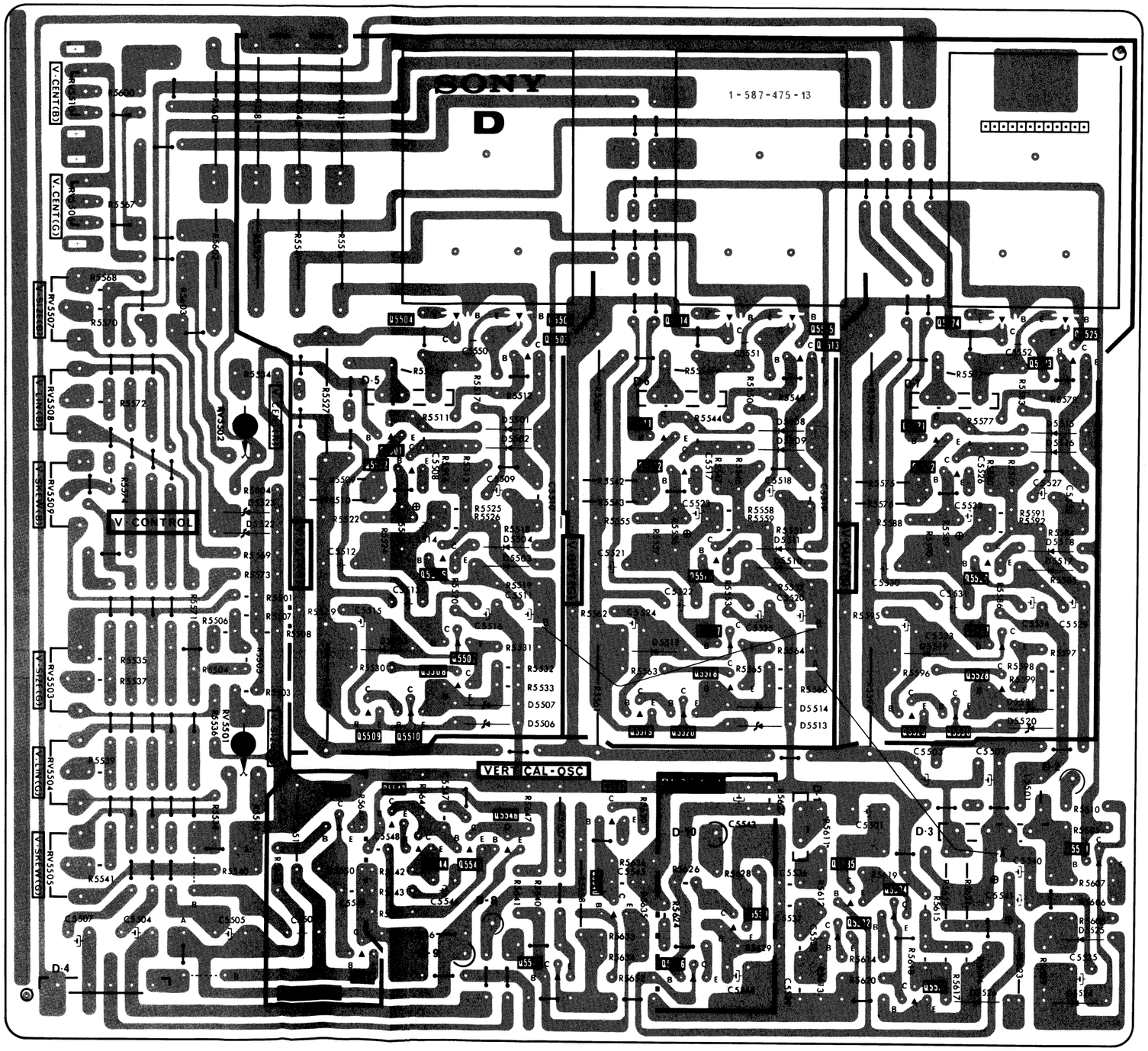


V. OSC, V. CENT
V. OUT, PARABOLA **D** **D**

MOUNTING DIAGRAM
— D Board —

IC , Q	D	ADJ
		RV5510
		RV5506
5504,5505 5514,5515 5524,5525 5523		RV5507
5503,5513		
		RV5508
5501,5511 5521	5501,5508 5515 5502,5509 5516	RV5502
5502,5512 5522		RV5509
	5523	
	5522	
5506,5516 5526	5504,5511 5518 5503,5510 5517	
5507,5517 5527	5505,5512 5519	
5508,5518 5528		RV5503
5509,5510 5519,5520 5529,5530	5507,5514 5521 5506,5513 5520	RV5501
		RV5504
5547,5543 5542		
5544,5545 5546 5531		RV5505
5535		
5540,5534 5539 5532	5525	
5548		
5541,5536		
5533	5526,5524	

IC , Q	D	ADJ

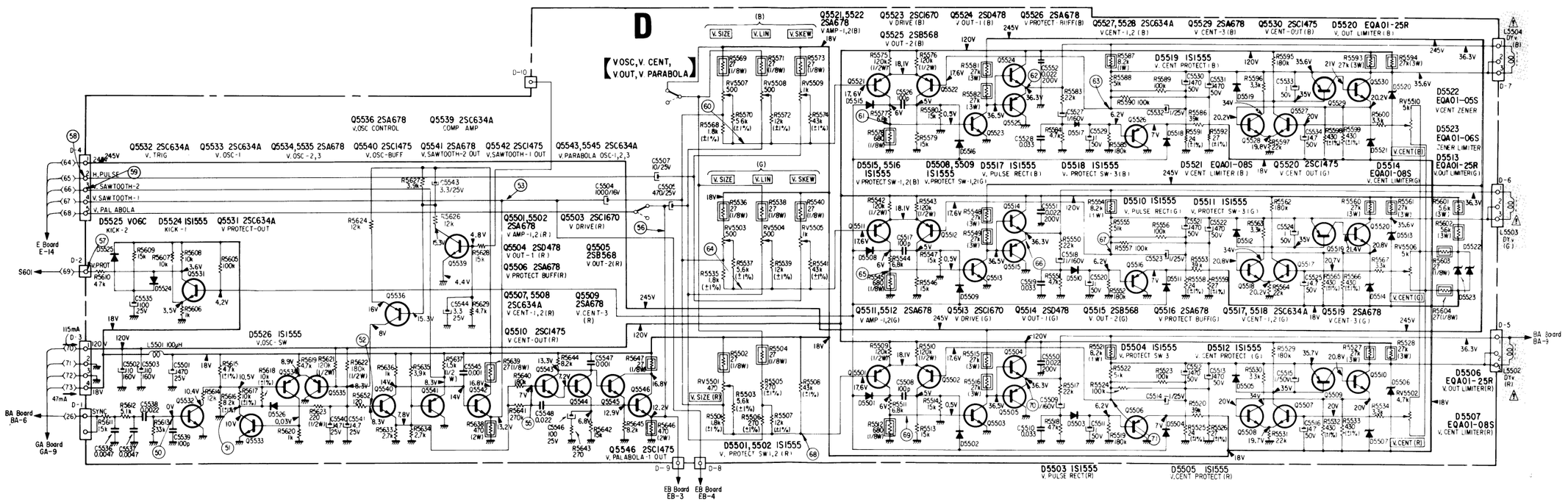


D D [V. OSC, V. CENT V. OUT, V. PARABOLA]

A B C D E F G H

1 2 3 4 5

SCHEMATIC DIAGRAM
– D Board –

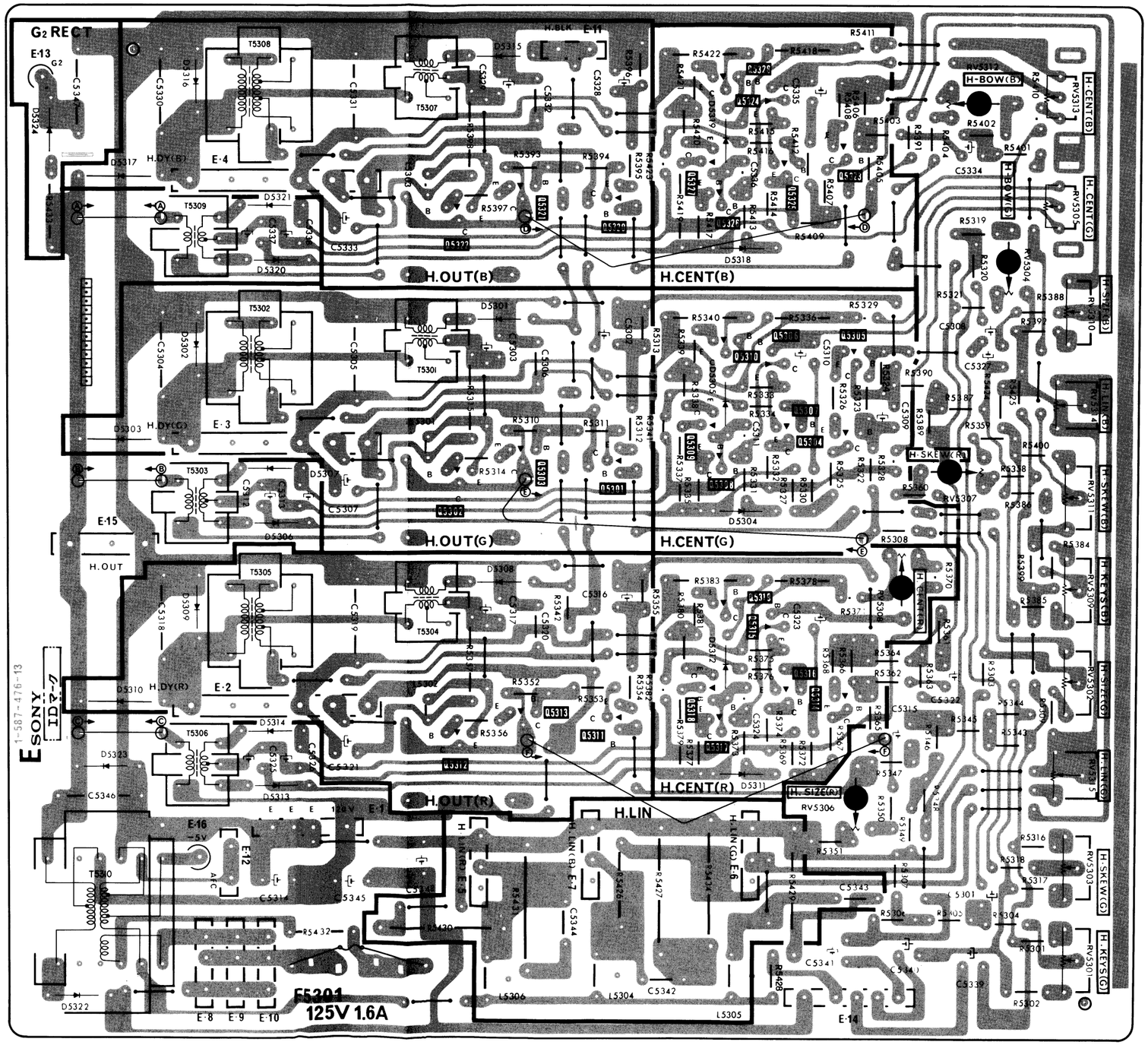


Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

H. CENT, H. OUT
PIN AMP, PIN OUT **E** **E**

MOUNTING DIAGRAM
– E Board –

IC , Q	D	ADJ
	5315	
5328	5316	RV5313
5324		RV5312
	5324	
5323	5319	
5327		
5325	5317	
5321		
5320,5326		
5322	5321	RV5305
	5318	
	5320	RV5304
	5301	RV5310
5310		
5305	5302	
5306		
	5305	RV5314
5307		
5309,5304		
	5303	
5303		
5301,5308		
5302	5307	RV5307
		RV5311
	5304	
	5306	
	5308	RV5308
		RV5309
5319	5309	
5315		
	5312	RV5302
5318,5316		
5314	5310	
5313,5311		
5317	5314	
5312		
	5323	
	5311	RV5315
	5313	RV5306
		RV5303
		RV5301
	5322	
IC , Q	D	ADJ

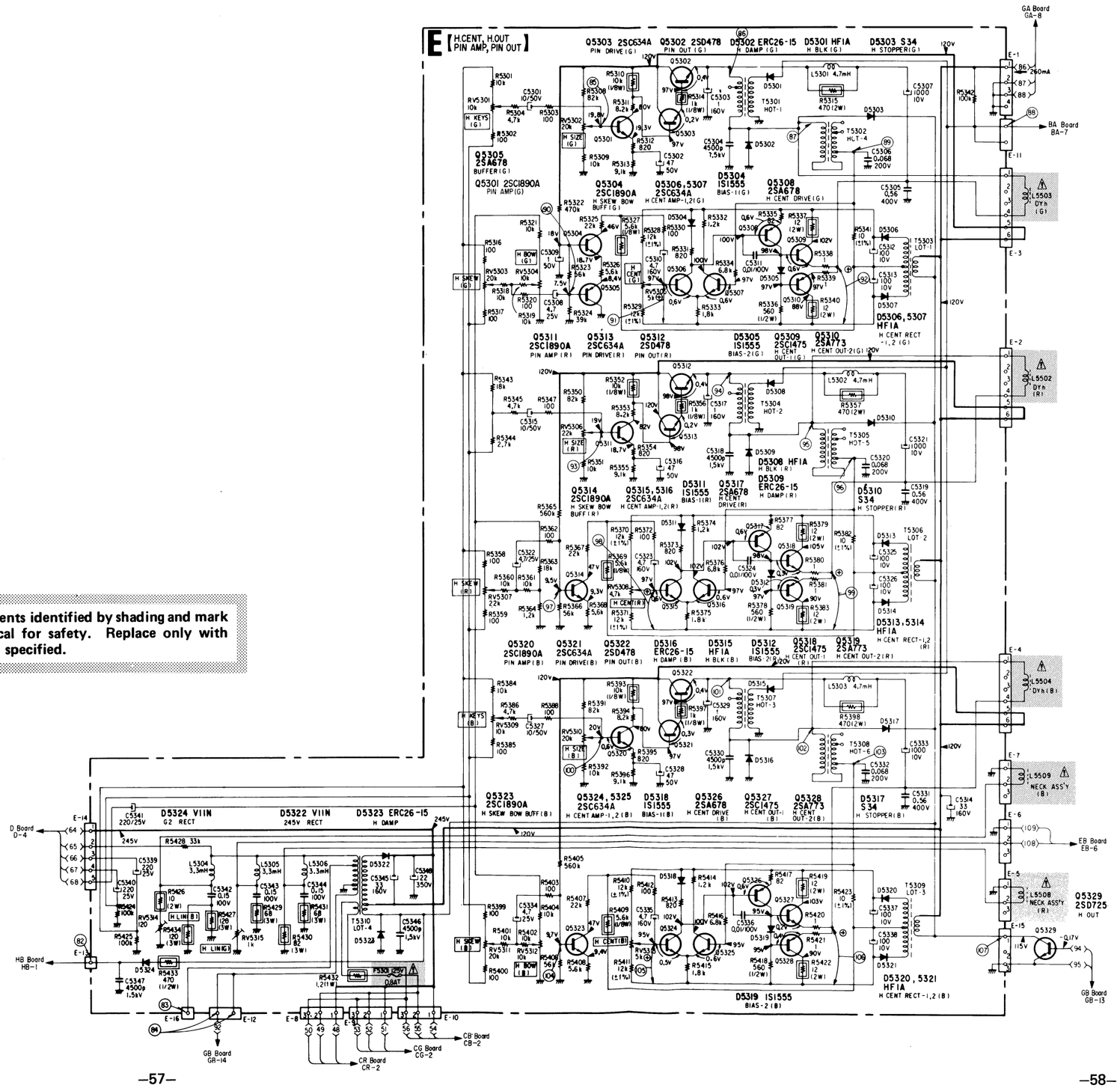


E E [H. CENT, H. OUT PIN AMP, PIN OUT]

A B C D E F G

1 2 3 4 5

SCHEMATIC DIAGRAM
— E Board —

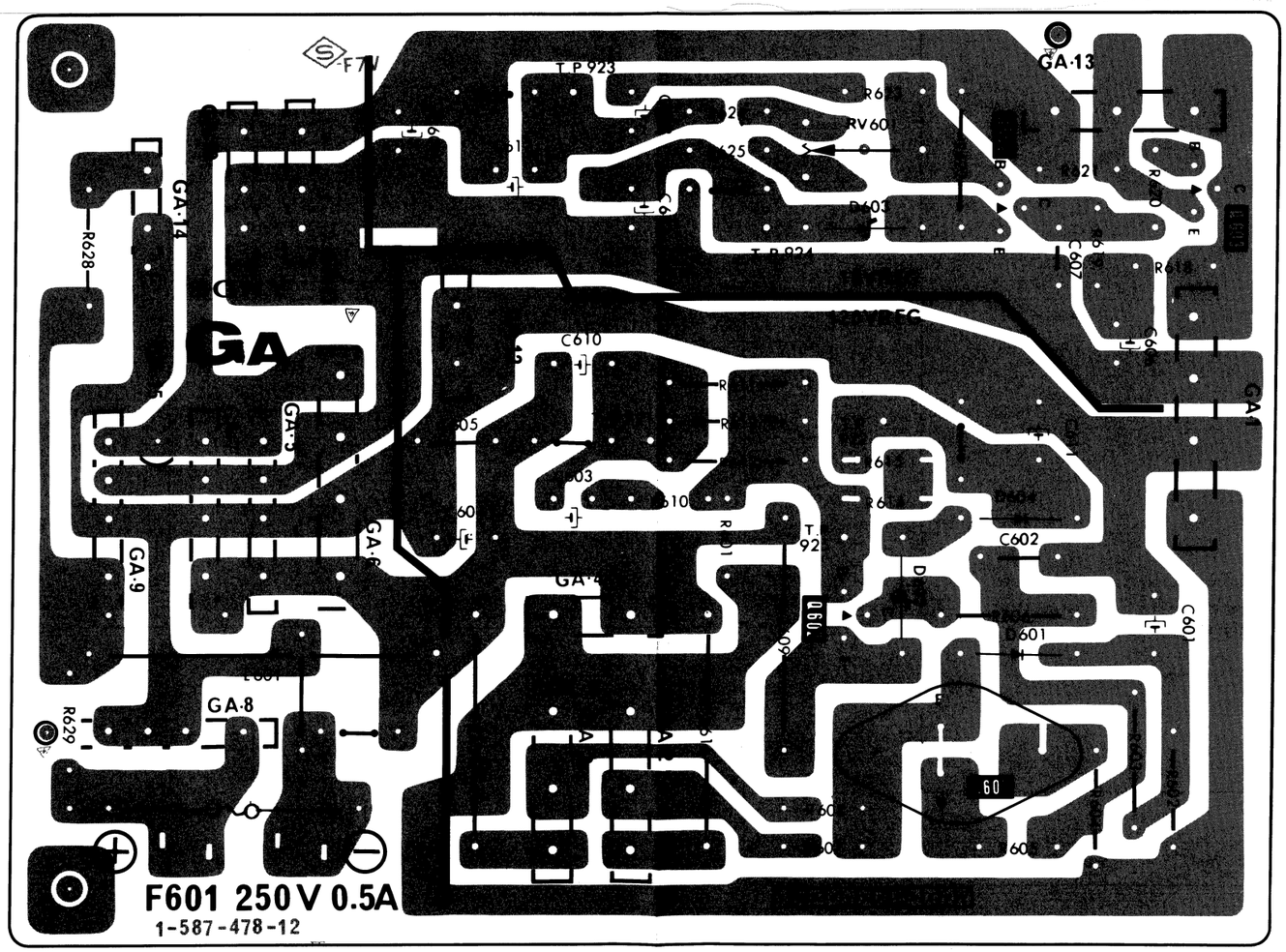


[120V/18V REG] GA GA

A B C D E F

1 2 3 4 5

MOUNTING DIAGRAM
– GA Board –

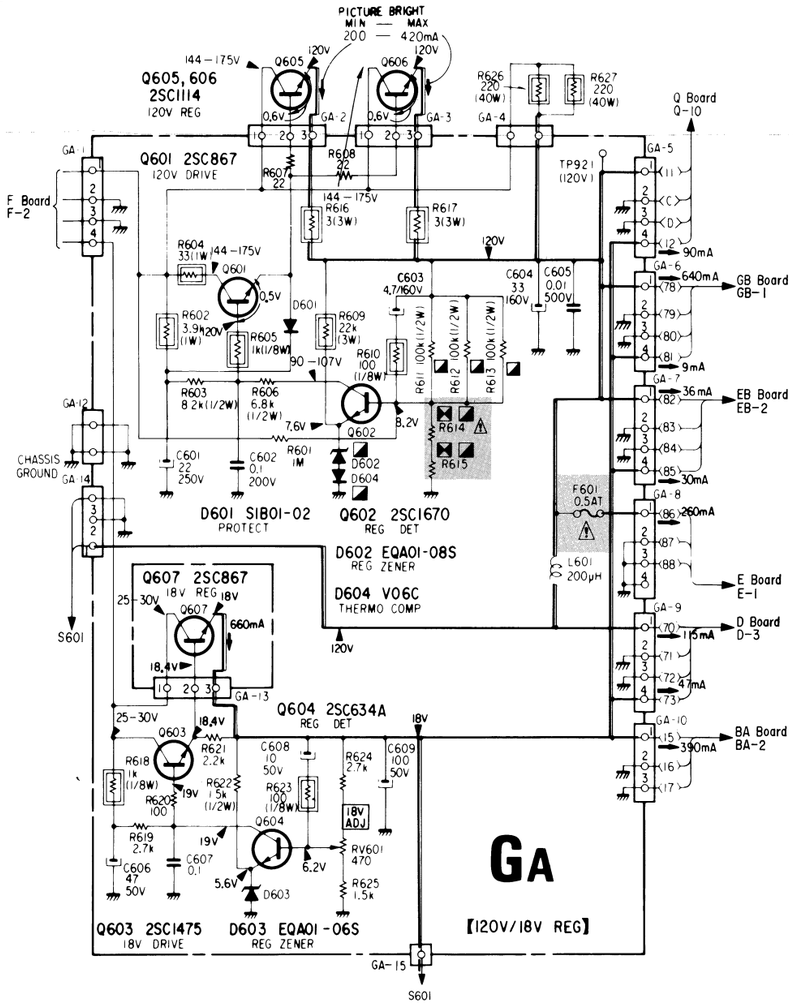


KP-5010PS/7210PS SCC-208A-B/SCC-209A-B

[120V/18V REG] **GA**

Z [AUDIO AMP]

SCHEMATIC DIAGRAM
— GA Board —



Note:

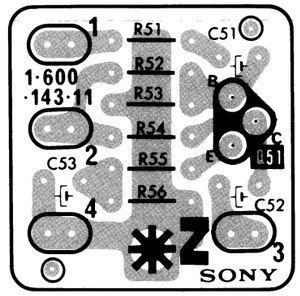
- The components identified by ⊠ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
  When replacing components identified by ◪ make the necessary adjustments indicated. If results do not meet the specified value, change the component identified by ⊠ and repeat the adjustment until the specified value is achieved.
  (Refer to R614/R615 Adjustment on page 26.)

When replacing the part in below table, be sure to perform the related adjustment.

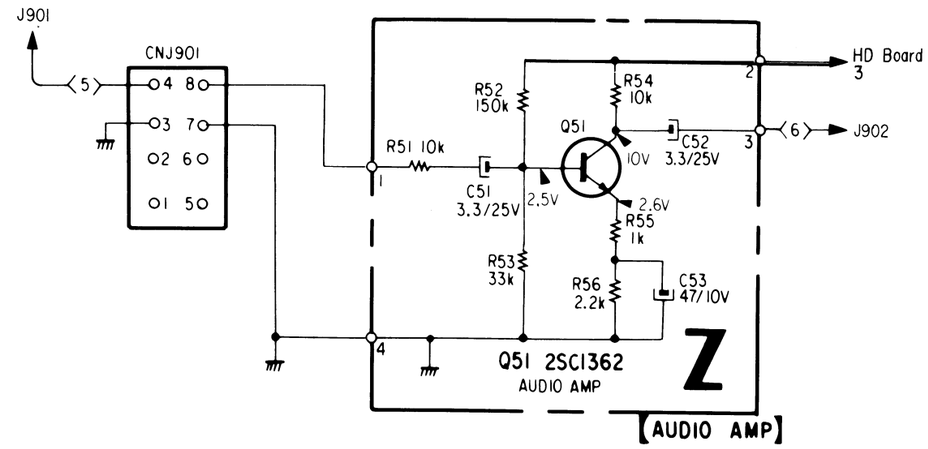
Part replaced (◪)	Adjustment
D602, R611, R612, R613 R614, R615	R614/R615 ADJUSTMENT

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

MOUNTING DIAGRAM
— Z Board —



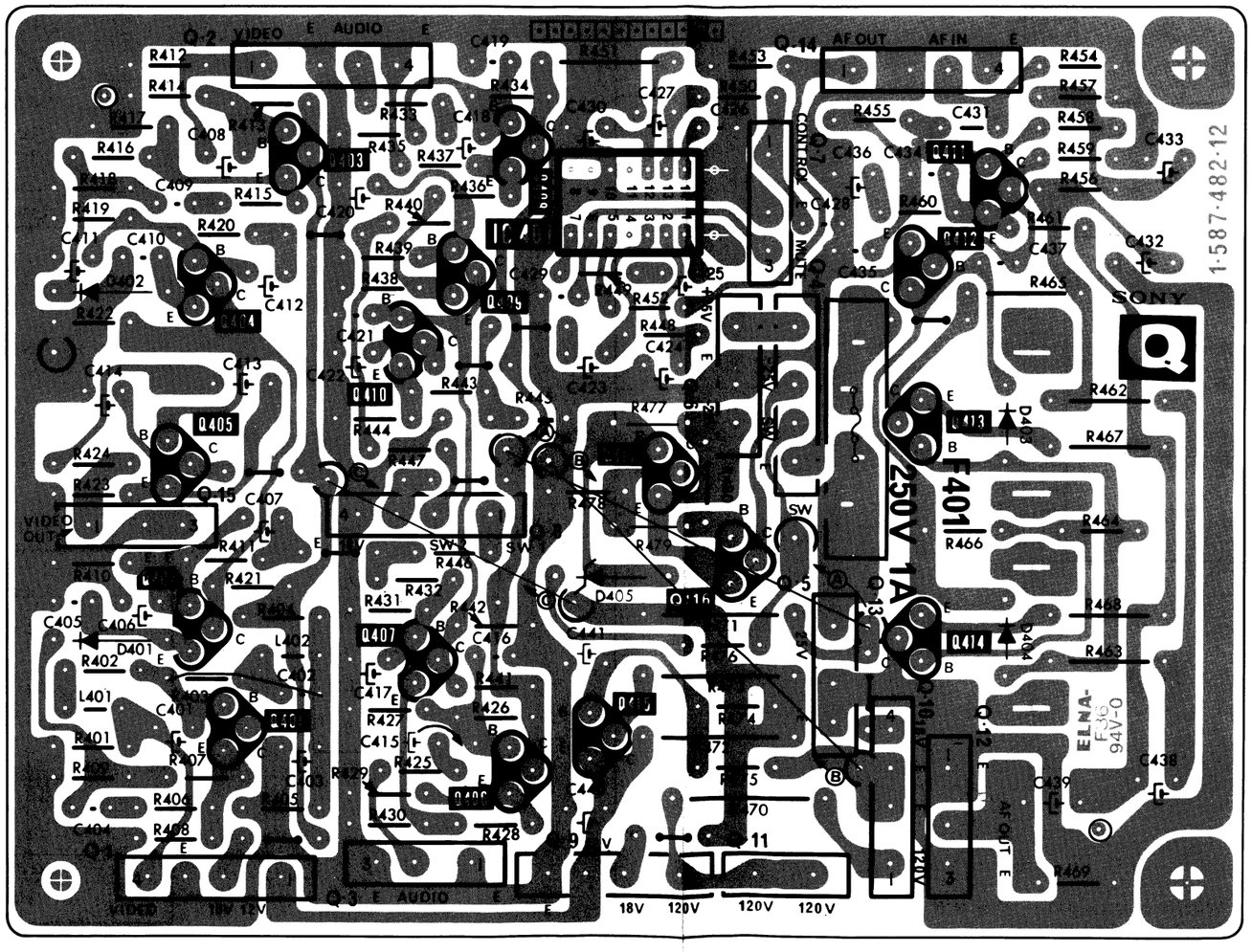
SCHEMATIC DIAGRAM
— Z Board —



VIDEO, AUDIO SW
AUDIO OUT

Q Q

MOUNTING DIAGRAM
— Q Board —



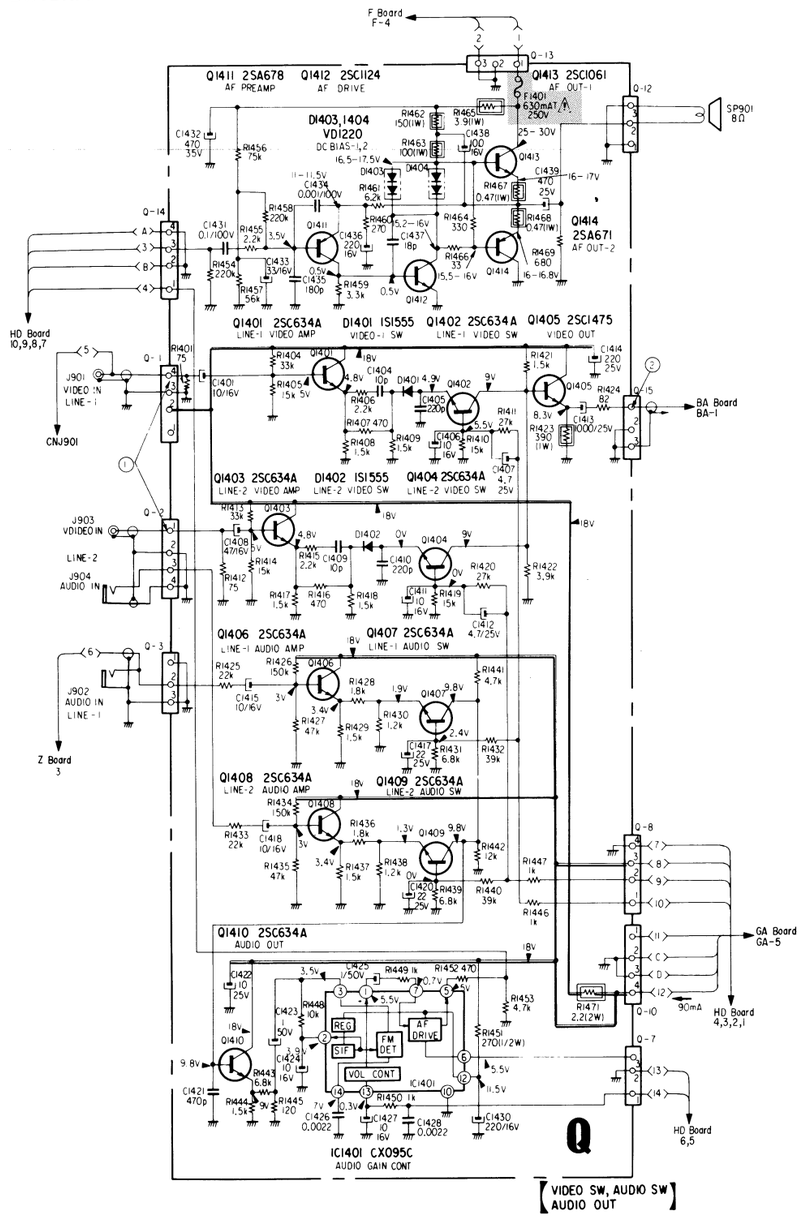
IC , Q	D
408	
403	
411	
IC401	
412	
409	
404	402
410	
413	403
405	
402	401
414	404
407	
401	
406	

IC , Q | D

VIDEO SW, AUDIO SW
AUDIO OUT

Q

SCHEMATIC DIAGRAM
— Q Board —



Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

NOTES ON SCHEMATIC DIAGRAMS

Note:

- All capacitors are in μF unless otherwise noted. p : μμF 50WV or less are not indicated except for electrolytics.
- All resistors are in ohms, ¼W unless otherwise noted. k : 1000Ω, M : 1000kΩ
- : nonflammable resistor.
- △ : internal component.
- : panel designation.
- The components identified by ⊠ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
  When replacing components identified by ◪ make the necessary adjustments indicated. If results do not meet the specified value, change the component identified by ⊠ and repeat the adjustment until the specified value is achieved.
  (Refer to R6211/R6212 Adjustment, R6207/R6208 Adjustment (On Page 28) (On Page 28) and R614/R615 Adjustment. (On Page 26))

When replacing the part in below table, be sure to perform the related adjustment.

Part replaced (◪)	Adjustment
DC851 R807, R808, R810 T801, T802 C802, C803, C804, C805 Q6204, Q6205, D6207 R6207, R6208, R6210, R6211 R6212	R6211/R6212 ADJUSTMENT R6207/R6208 ADJUSTMENT
R805, R806, R809 Q6201, Q6202, Q6203, Q6214 D6201, R6206, R6237	R6207/R6208 ADJUSTMENT
D602, R611, R612, R613 R614, R615	R614/R615 ADJUSTMENT

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- Reference numbers of the Q board differ from those indicated on the printed circuit board of the set.
  Read the reference numbers of the Q board by adding 1000 to those indicated.

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken with a 20,000-ohm-per-volt VOM.
- ⊘ : adjustable without removing cabinet.
- ▭ : adjustment for repair.
- Readings are taken with a color-bar video signal input.
- Voltage variations may be noted due to normal production tolerances.
- ——— : B+ bus.
- ◆ : When this portion is touched with the probe of a VOM, the set will be turned off.
- Voltages in Q board are taken with the LINE switch set to 1.
- Voltages in BB board are taken with PAL color-bar video signal input.
  ( ) : SECAM
  < > : NTSC 4.43MHz

A B C D E F

1

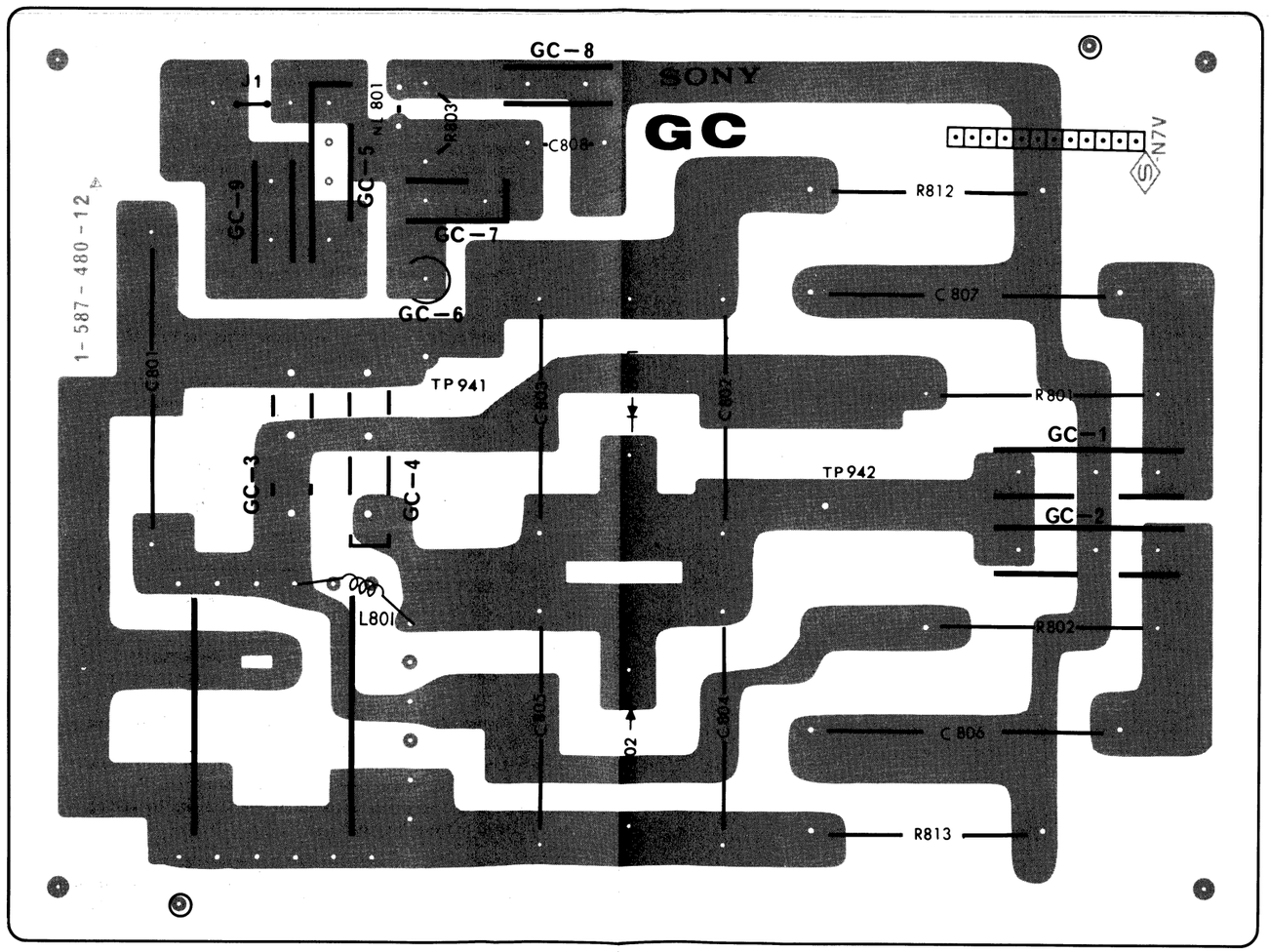
2

3

4

5

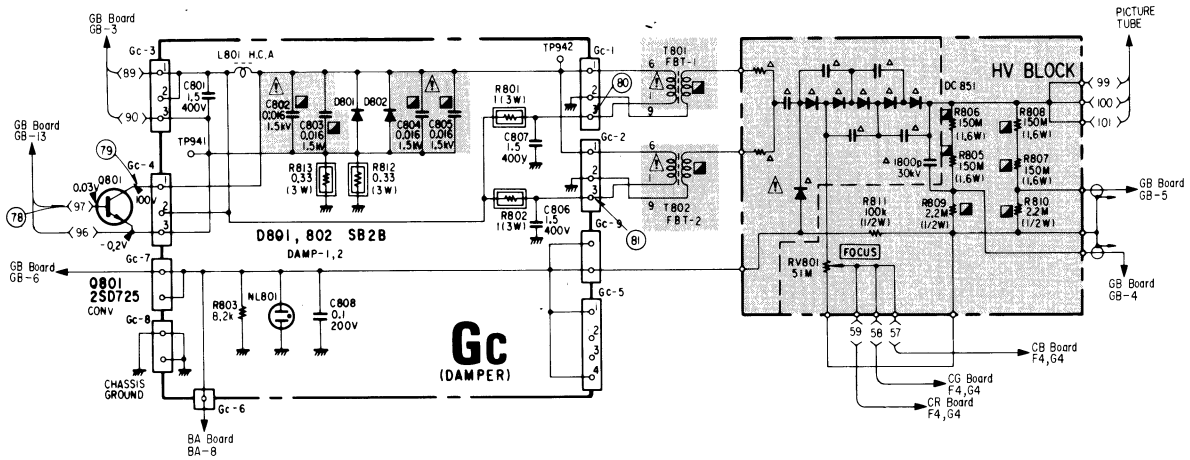
MOUNTING DIAGRAM
– GC Board –



A B C D

1 2 3 4 5

SCHEMATIC DIAGRAM
— GC Board —



Note:

- The components identified by ⊠ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
  When replacing components identified by ◪ make the necessary adjustments indicated. If results do not meet the specified value, change the component identified by ⊠ and repeat the adjustment until the specified value is achieved.
  (Refer to R6211/R6212 Adjustment and R6207/R6208 Adjustment on page 28.)

When replacing the part in below table, be sure to perform the related adjustment.

Part replaced (◪)	Adjustment
T801, T802, HV BLOCK C802, C803, C804, C805 R807, R808, R809, R810	R6211/R6212 R6207/R6208 ADJUSTMENT

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

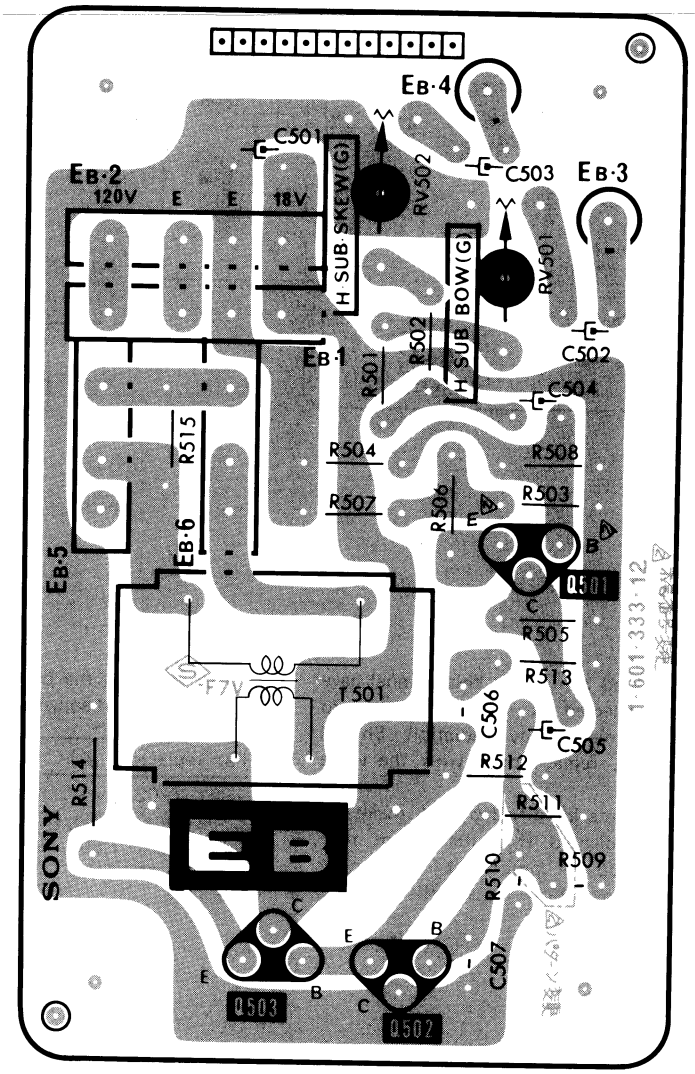
EB

A B C D

1 2 3 4 5

MOUNTING DIAGRAM
— EB Board —

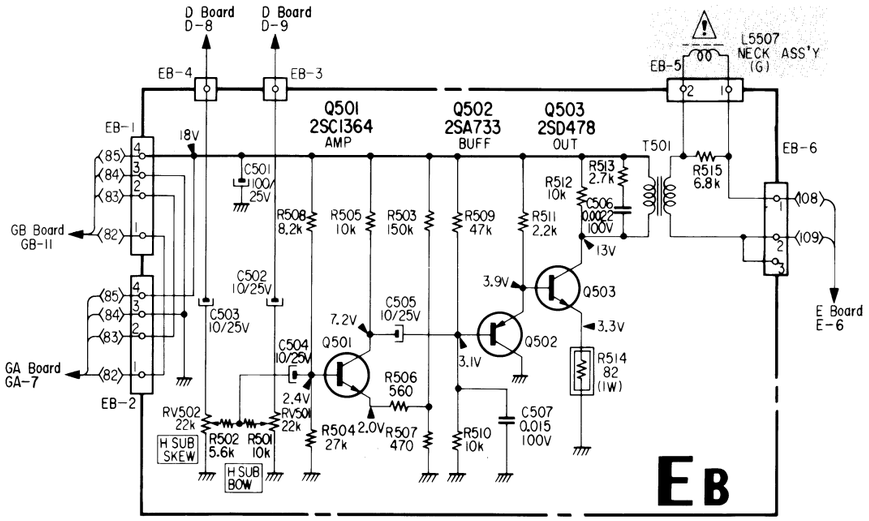
KP-5010PS : Serial No. up to 11,100
KP-7210PS : Serial No. up to 11,300



[REGISTRATION COMPENSATOR] **EB** **HC** [COUSTOMER CONTROL]

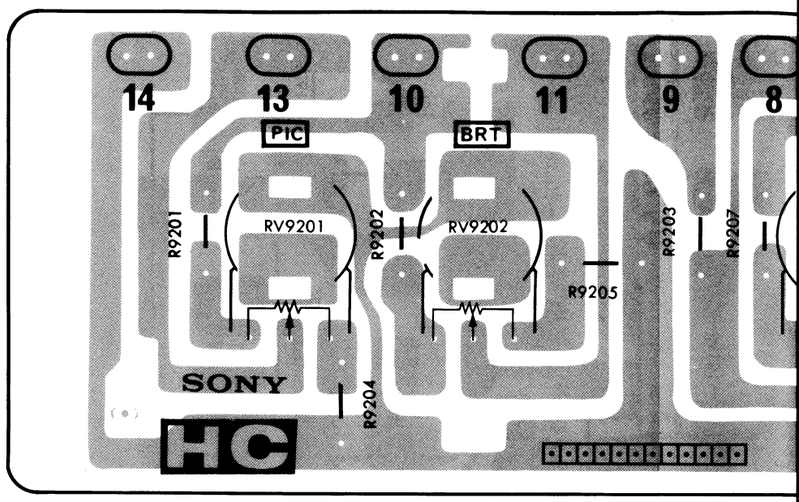
SCHEMATIC DIAGRAM
– EB Board –

KP-5010PS : Serial No. up to 11,100
KP-7210PS : Serial No. up to 11,300

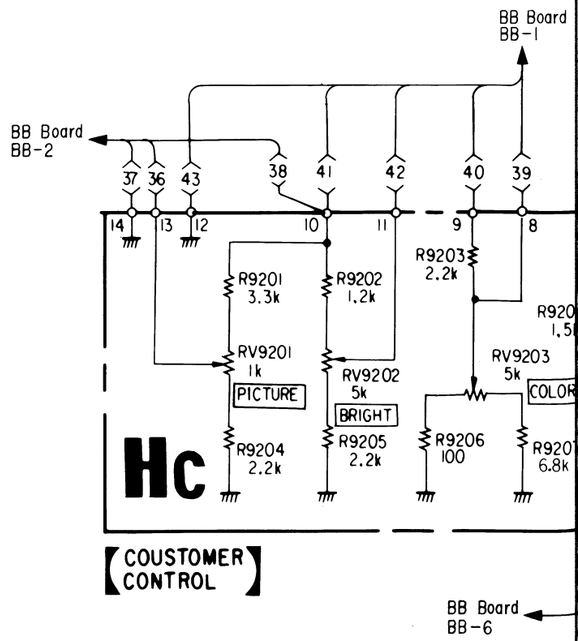


Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

MOUNTING DIAGRAM
– HC, HA Board –



SCHEMATIC DIAGRAM
– HC, HA Board –



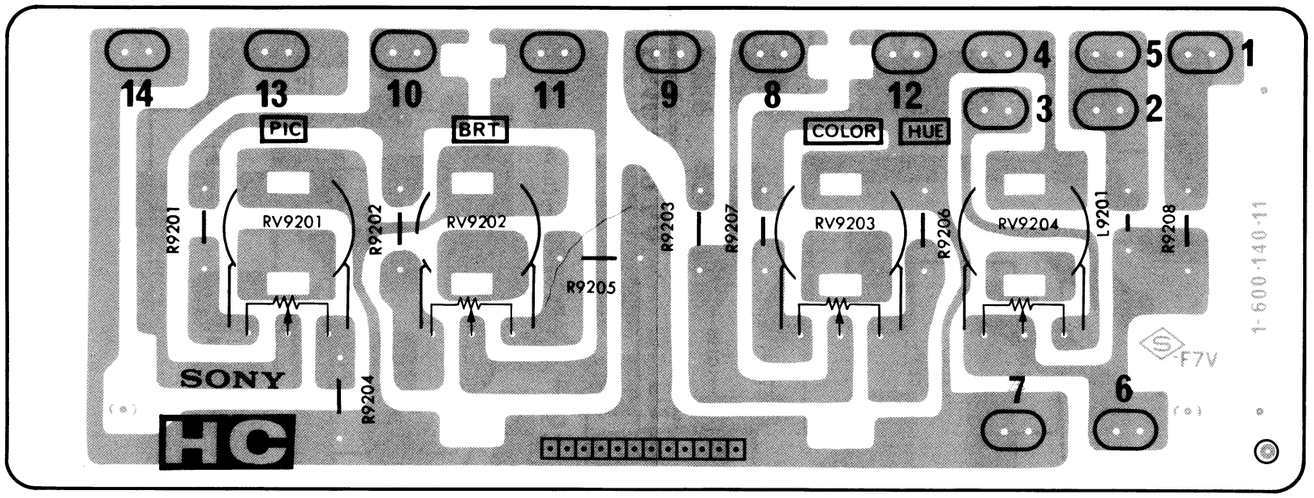
ATION] EB HC [COUSTOMER CONTROL]

HC

D A B C D E F G

1

MOUNTING DIAGRAM
– HC, HA Board –



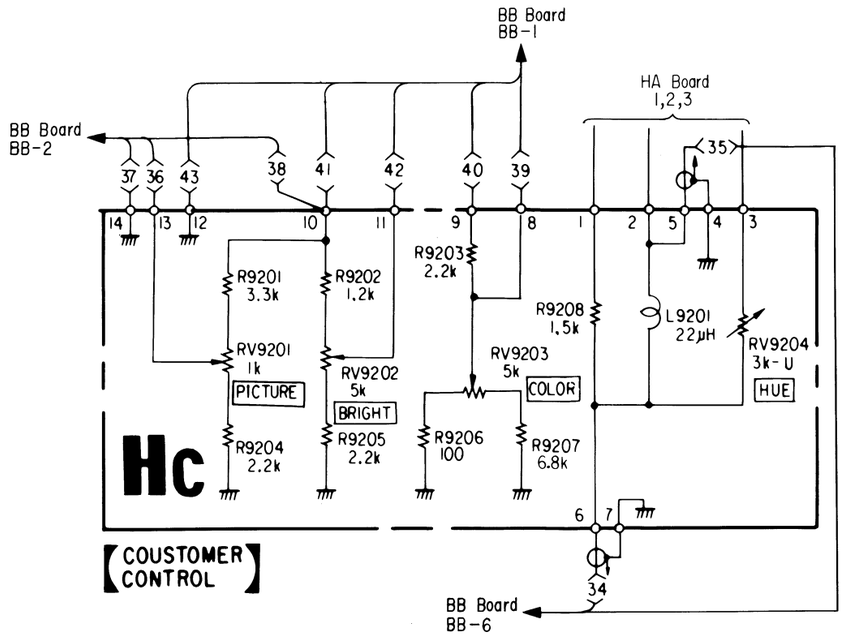
2

SCHEMATIC DIAGRAM
– HC, HA Board –

3

4

5

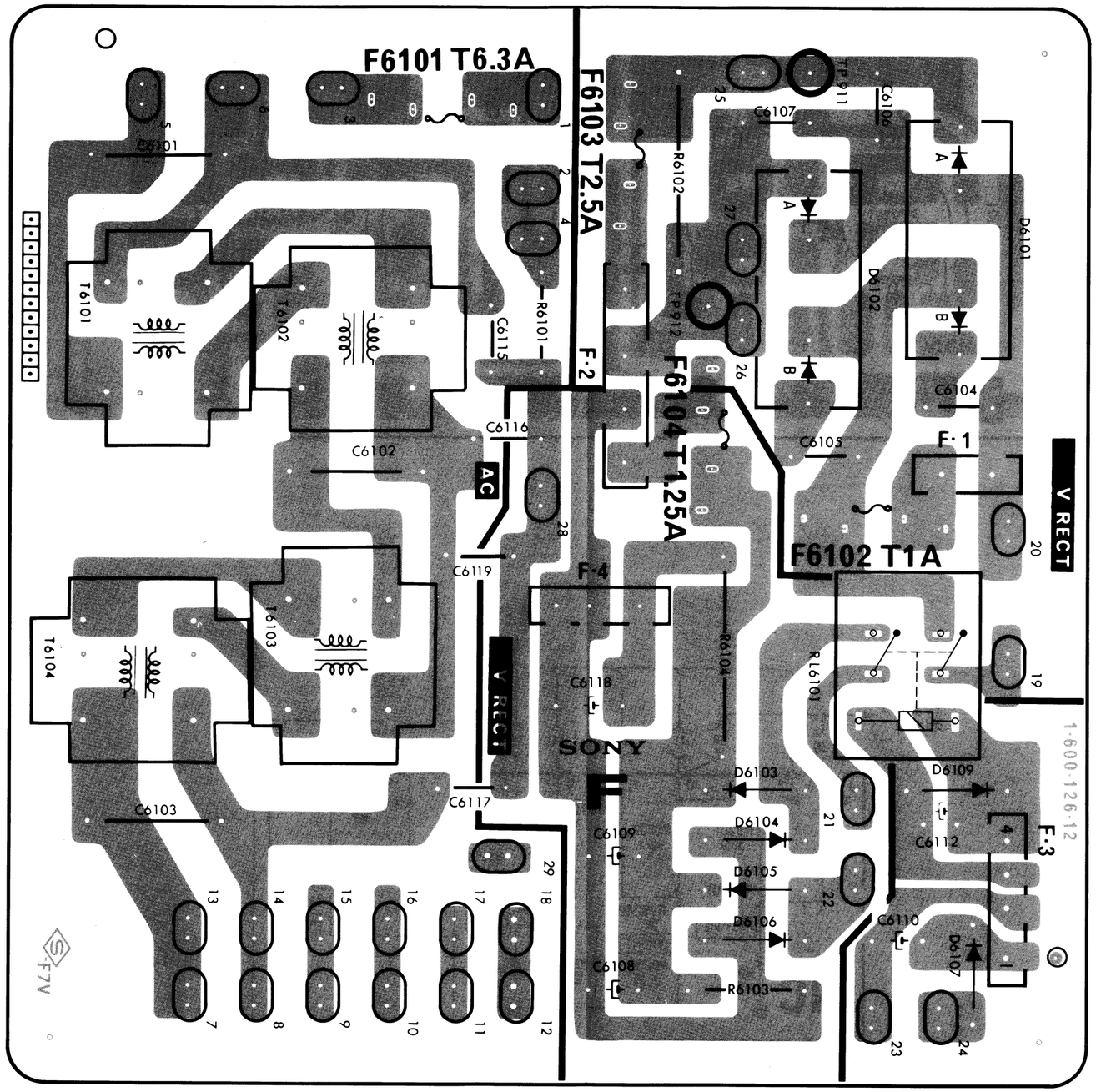


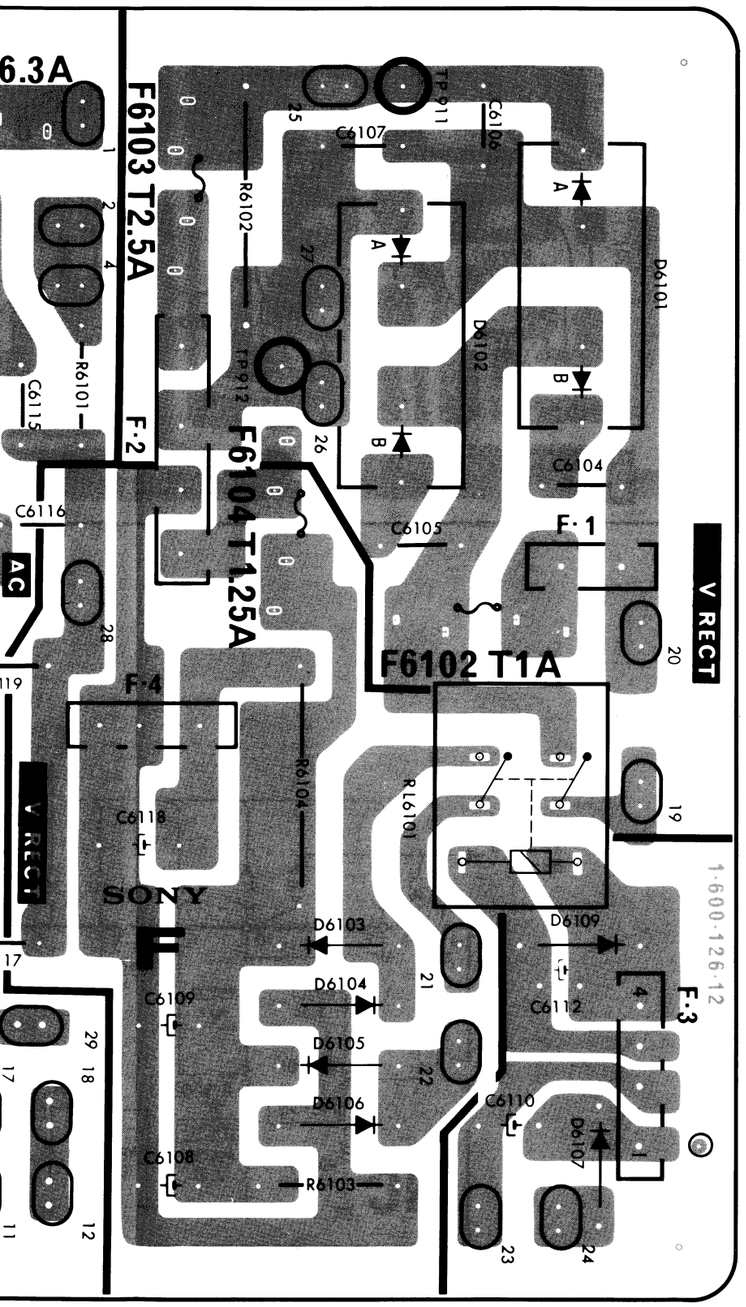
SCC-208A-B/SCC-209A-B KP-5010PS/7210PS KP-5010

F [LINE RECT]

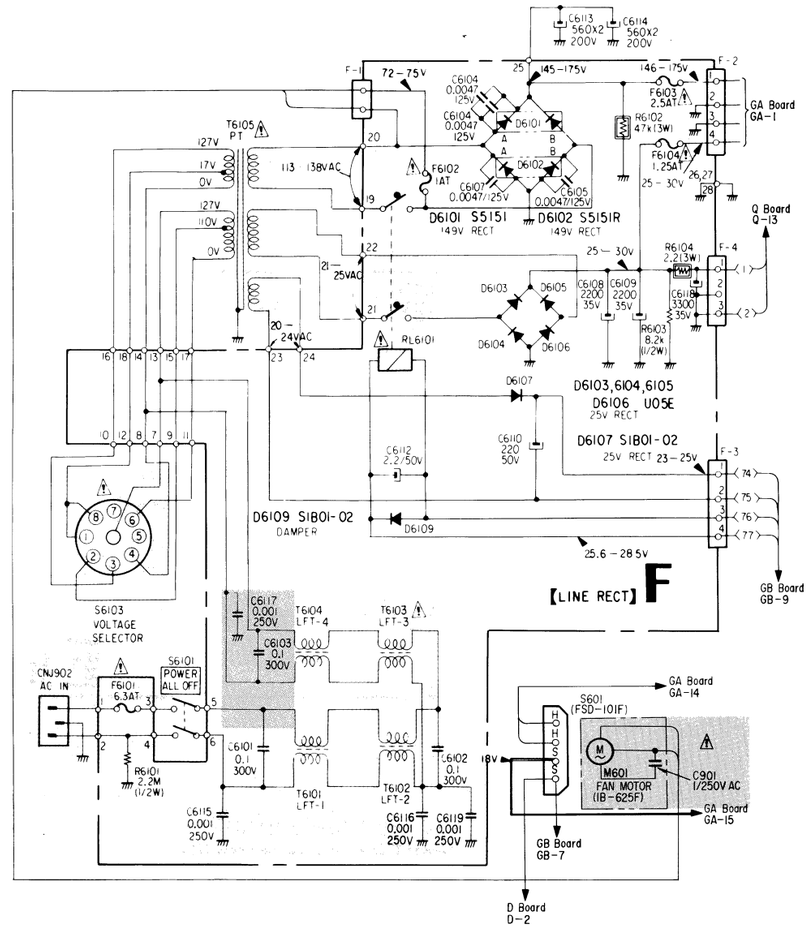
F [LINE RECT

MOUNTING DIAGRAM
— F Board —





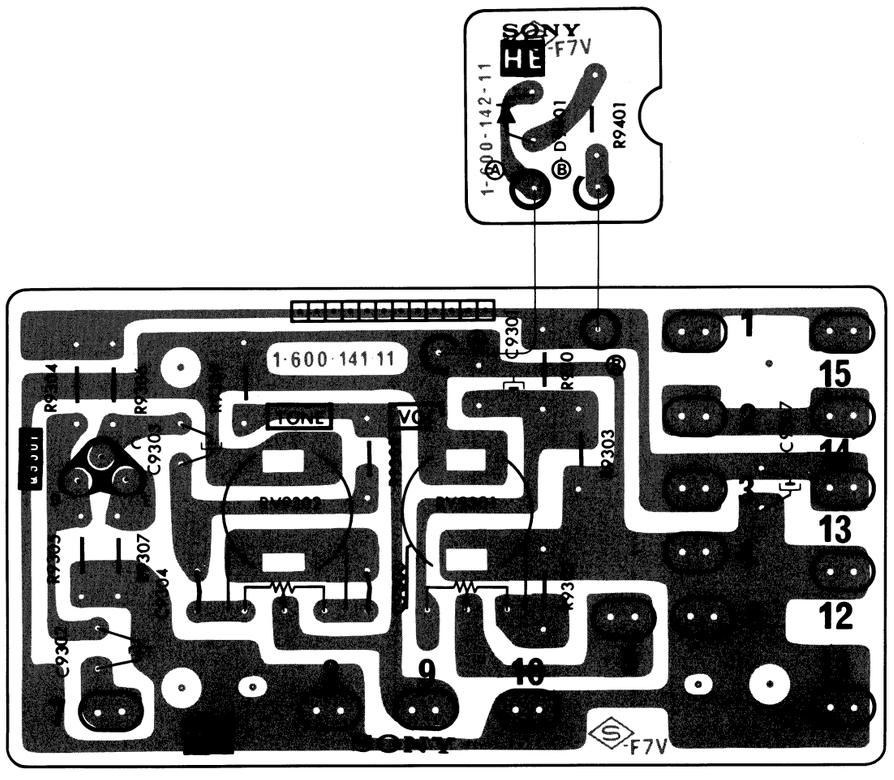
SCHEMATIC DIAGRAM
— F Board —



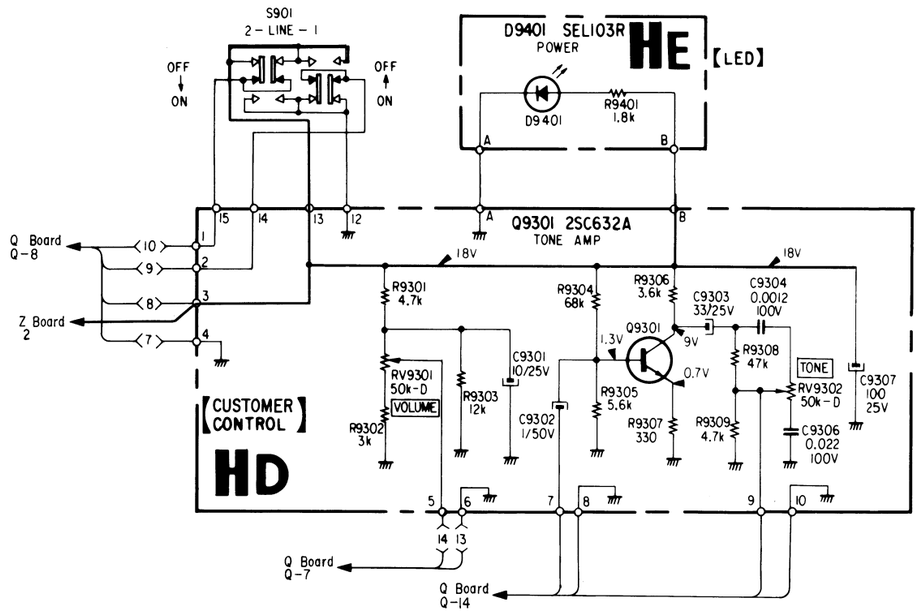
Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

HE HD HE [LED] HD [COUSTOMER CONTROL]

MOUNTING DIAGRAM
— HE, HD Board —



SCHEMATIC DIAGRAM
— HE, HD Board —

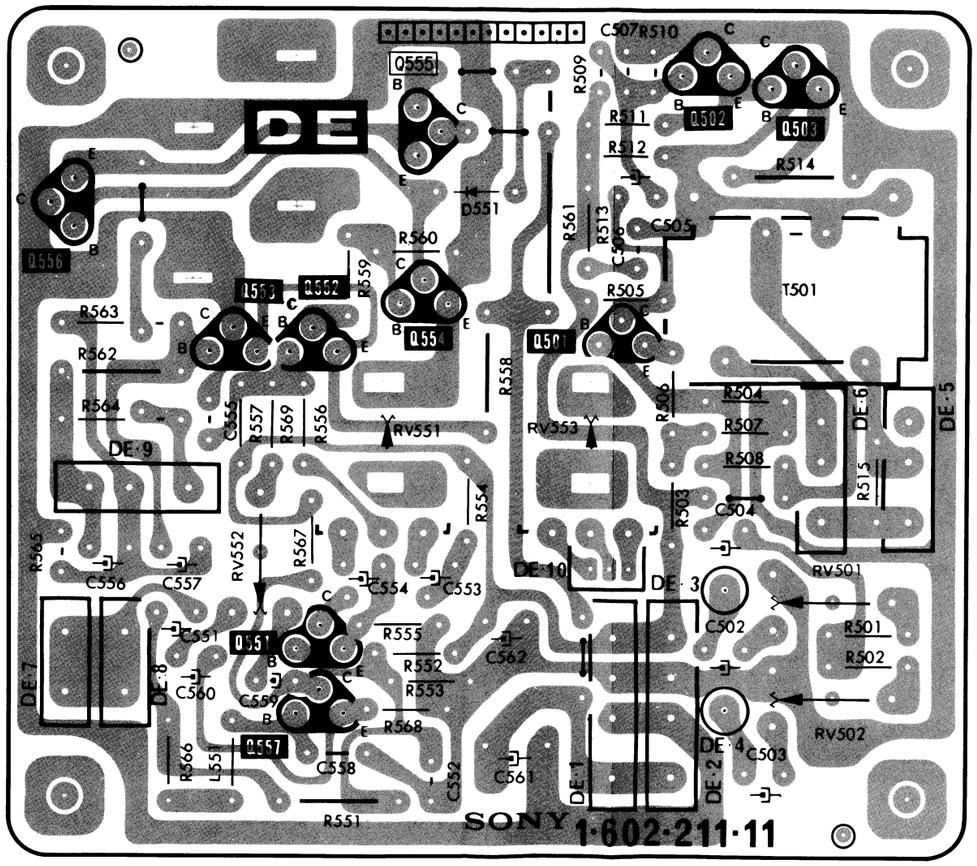


A B C D E F

1 2 3 4 5

MOUNTING DIAGRAM
– DE Board –

KP-5010PS : Serial No. 11,101 and later
KP-7210PS : Serial No. 11,301 and later



Q	D	ADJ
502 503 555		
556	511	
554		
553,552 501		RV551 RV553
		R552
		RV501
551		
557		RV502
Q	D	ADJ

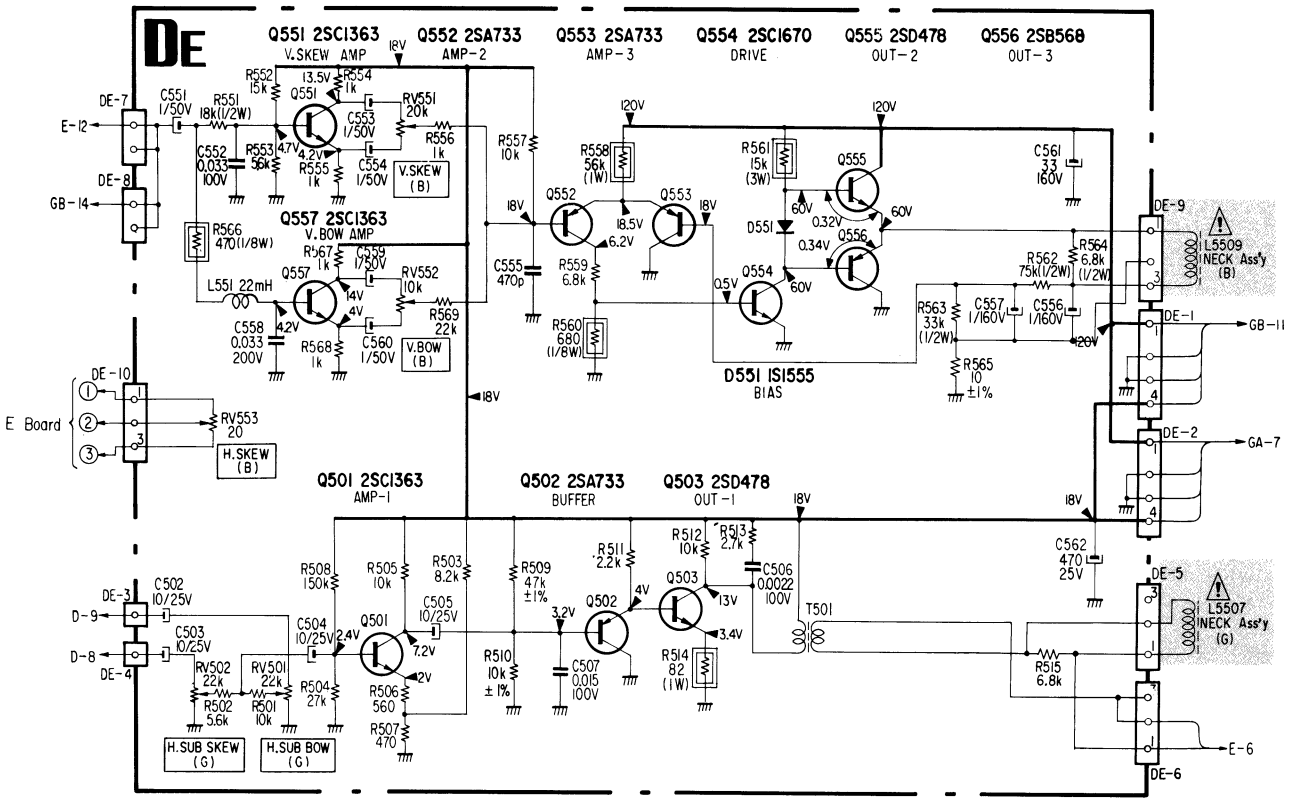
A B C D

1 2 3 4 5

SCHEMATIC DIAGRAM

– DE Board –

KP-5010PS : Serial No. 11,101 and later
KP-7210PS : Serial No. 11,301 and later



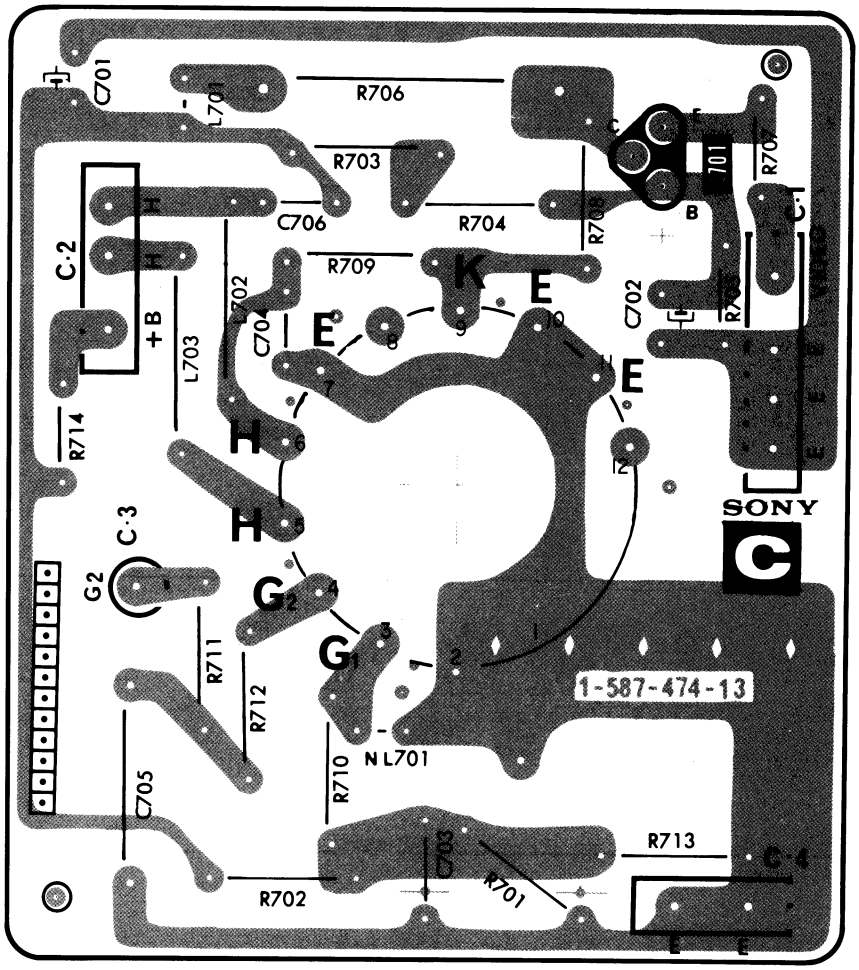
Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

C [B, G, R, OUT]

A B C D

1 2 3 4 5

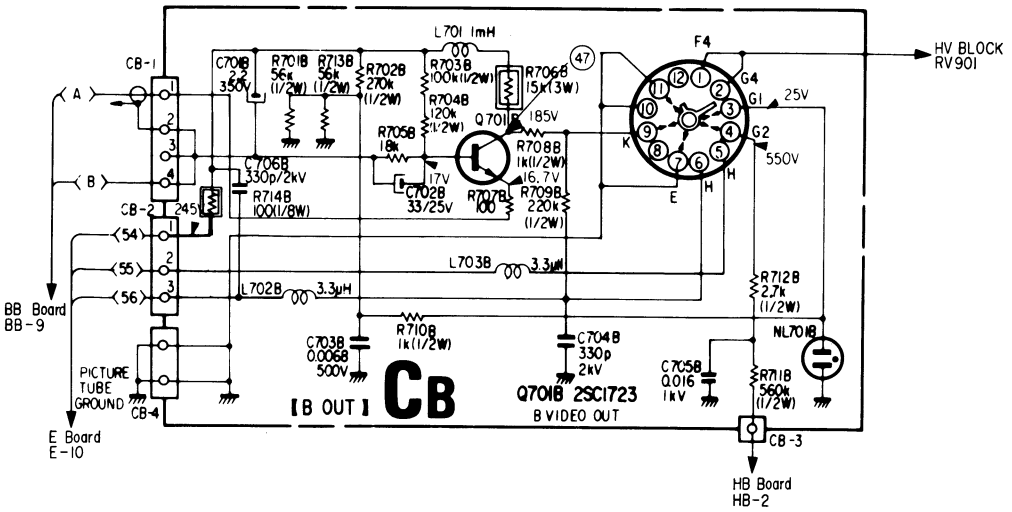
MOUNTING DIAGRAM
— CB/CG/CR Board —



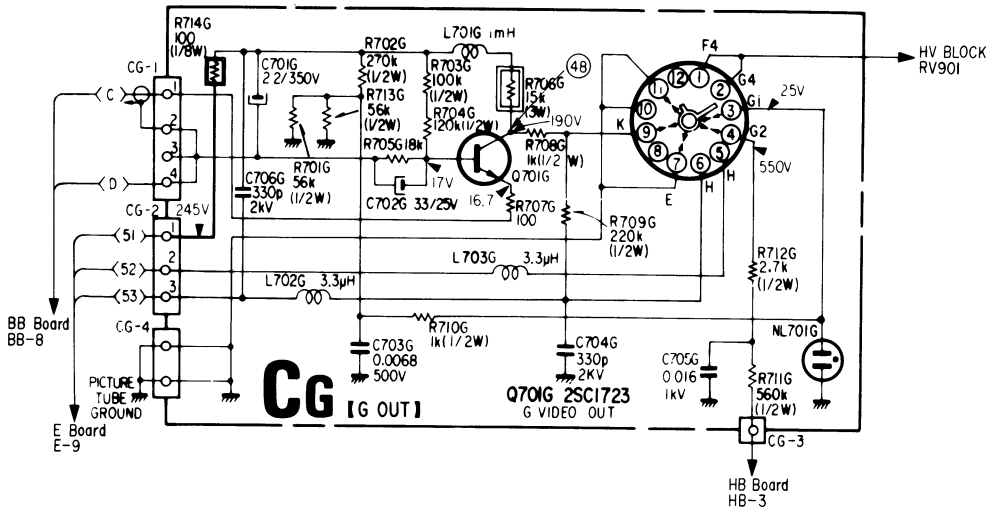
A B C D

1 2 3 4 5

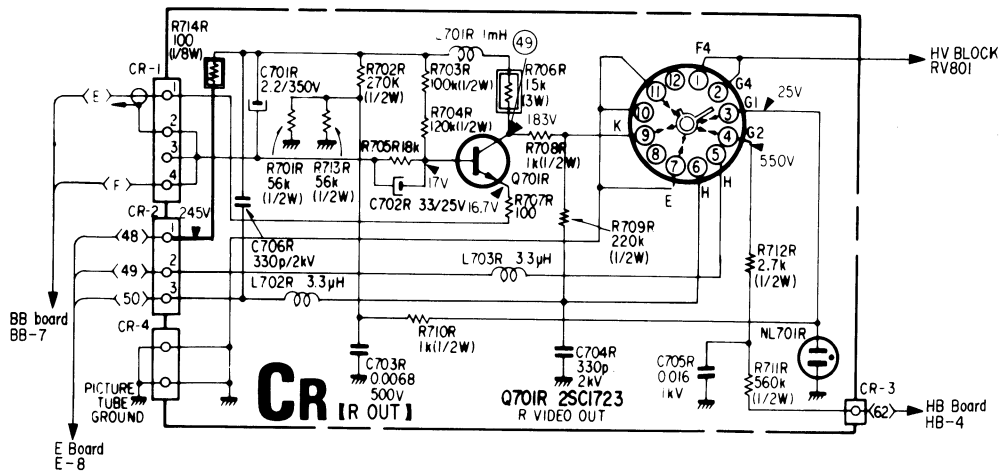
SCHEMATIC DIAGRAM
– CB Board –



SCHEMATIC DIAGRAM
– CG Board –

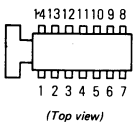


SCHEMATIC DIAGRAM
– CR Board –

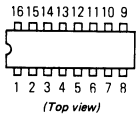


5-3. SEMICONDUCTORS

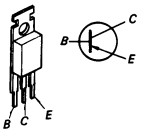
CX095C



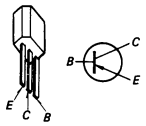
TBA540
TCA640
TCA650
TCA660B



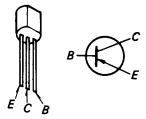
2SA671
2SB568



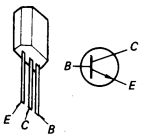
2SA678
2SA1027R



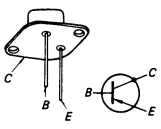
2SA684
2SA773



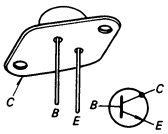
2SC403C
2SC632A
2SC634A



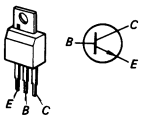
2SC867
2SC867A



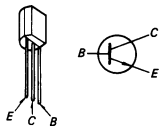
2SC1114
2SC1116A
2SD725



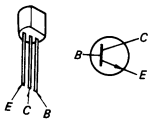
2SC1124
2SC1962



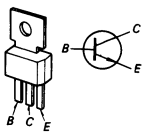
2SC1362
2SC1364



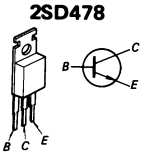
2SC1474
2SC1475
2SC1670
2SC1890A
2SD666A



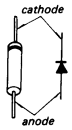
2SC1723



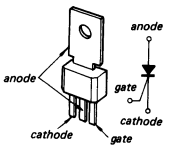
2SC1061
2SD478



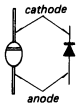
1S1555
1S1585
10E2



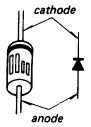
CV12E



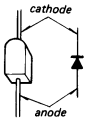
ERC26-15
GH3F
U05E
V06C
V09C
V11N



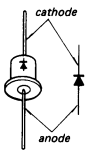
EQA01-05S
EQA01-06S
EQA01-08S
EQA01-10R
EQA01-11S
EQA01-25R
EQB01-05
EQB01-06
EQB01-08
EQB01-10
EQB01-11Z
EQB01-25
SIB01-02



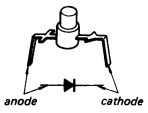
HF1
HF1A



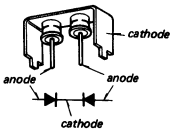
S34
SB2B



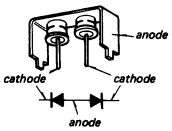
SEL103R



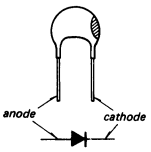
S5151



S5151R

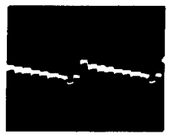


VD1220



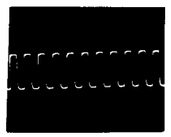
5-4. WAVEFORMS

(1) (2) PAL, NTSC 1Vp-p (H)



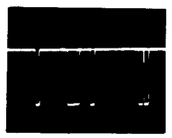
(1) (2) SECAM 1Vp-p (H)

(3) 100Vp-p (H)

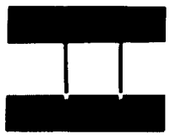


(4) 4.4Vp-p

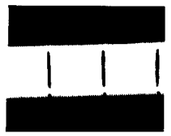
(5) 86Vp-p (V)



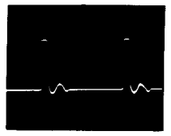
(6) 6.8Vp-p



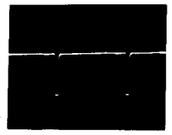
(7) 6.8Vp-p



(8) 1.6Vp-p

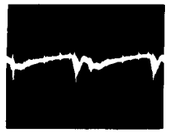


(9) 14Vp-p (H)



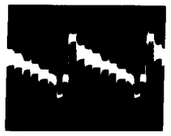
(10) 5.2Vp-p (H)

(11) PAL, NTSC 0.8Vp-p (H)



(11) SECAM 0.5Vp-p (H)

(12) PAL 2.6Vp-p (H)

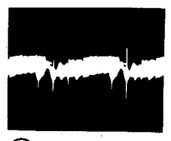


(12) SECAM 2.2Vp-p (H)

(12) NTSC 2.8Vp-p (H)

(13) PAL, NTSC 3.3Vp-p (H)

(13) SECAM 0.8Vp-p (H)



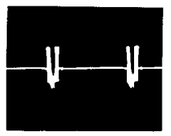
(14) PAL, NTSC 0.44Vp-p (H)

(14) SECAM 0.54Vp-p (H)

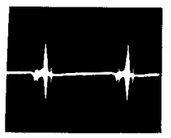
(15) PAL..... 2.5Vp-p (H) NTSC..... 0.62Vp-p (H)

(15) SECAM 2.6Vp-p (H)

(16) PAL 2Vp-p (H)



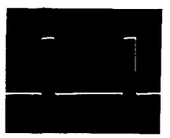
(16) SECAM 5.2Vp-p (H)



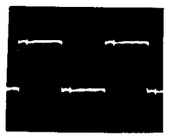
(16) NTSC 1.9Vp-p (H)

(17) PAL .....2Vp-p (H) NTSC.....0.62Vp-p (H)

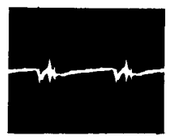
(17) SECAM 2.5Vp-p (H)



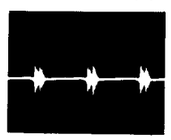
(18) PAL, SECAM, NTSC 7Vp-p (H)



(19) PAL, SECAM, NTSC 3.3Vp-p (H)



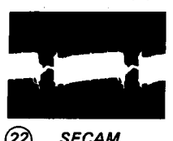
(20) PAL, NTSC 0.44Vp-p (H)



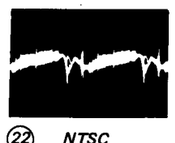
(20) SECAM 2.3Vp-p (H)

(21) PAL, SECAM, NTSC 0.16Vp-p (H)

(22) PAL 0.46Vp-p (H)



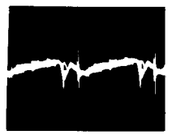
(22) SECAM 0.8Vp-p (H)



(22) NTSC 0.46Vp-p (H)

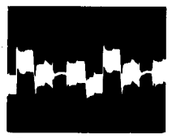
(23) PAL 0.4Vp-p (H)

(23) SECAM 0.6Vp-p (H)



(23) NTSC 0.4Vp-p (H)

(24) PAL 1.4Vp-p (H)



(24) SECAM 1.6Vp-p (H)

(24) NTSC 1Vp-p (H)

(25) PAL 1.6Vp-p (H)

(25) SECAM 2.4Vp-p (H)

(25) NTSC 1Vp-p (H)

(26) PAL 1.2Vp-p (H)

(26) SECAM 2.2Vp-p (H)

(26) NTSC 0.48Vp-p (H)

(27) PAL 2.2Vp-p (H)

(27) SECAM 1.6Vp-p (H)

(27) NTSC 0.64Vp-p (H)

(28) PAL 2.9Vp-p (H)

(28) SECAM 2.6Vp-p (H)

(28) NTSC 0.9Vp-p (H)

(29) PAL 2.4Vp-p (H)

(29) SECAM 2Vp-p (H)

(29) NTSC 0.8Vp-p (H)

(30) PAL 1.7Vp-p (H)

(30) SECAM 2.2Vp-p (H)

(30) NTSC 0.6Vp-p (H)

(31) PAL 2.5Vp-p (H)

(31) SECAM 1Vp-p (H)

(31) NTSC 3.6Vp-p (H)

... 2.5Vp-p (H)
... 0.62Vp-p (H)

p-p (H)

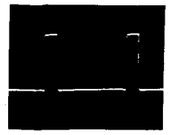
p (H)

p-p (H)

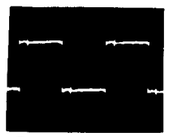
p-p (H)

..2Vp-p (H)
..0.62Vp-p (H)

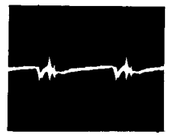
p-p (H)



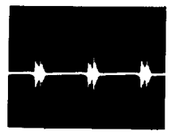
(18) PAL, SECAM, NTSC
7Vp-p (H)



(19) PAL, SECAM, NTSC
3.3Vp-p (H)

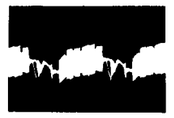


(20) PAL, NTSC
0.44Vp-p (H)



(20) SECAM
2.3Vp-p (H)

(21) PAL, SECAM, NTSC
0.16Vp-p (H)



(22) PAL
0.46Vp-p (H)

(22) SECAM
0.8Vp-p (H)

(22) NTSC
0.46Vp-p (H)

(23) PAL
0.4Vp-p (H)

(23) SECAM
0.6Vp-p (H)

(23) NTSC
0.4Vp-p (H)

(24) PAL
1.4Vp-p (H)

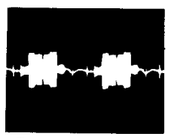
(24) SECAM
1.6Vp-p (H)

(24) NTSC
1Vp-p (H)

(25) PAL
1.6Vp-p (H)

(25) SECAM
2.4Vp-p (H)

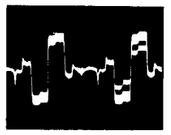
(25) NTSC
1Vp-p (H)



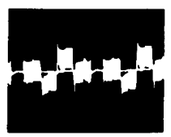
(26) PAL
1.2Vp-p (H)

(26) SECAM
2.2Vp-p (H)

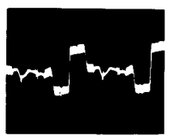
(26) NTSC
0.48Vp-p (H)



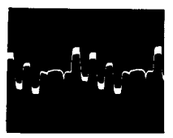
(27) PAL
2.2Vp-p (H)



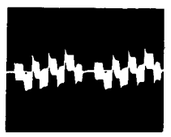
(27) SECAM
1.6Vp-p (H)



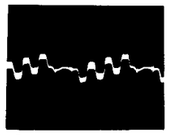
(27) NTSC
0.64Vp-p (H)



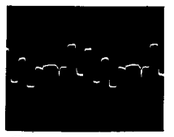
(28) PAL
2.9Vp-p (H)



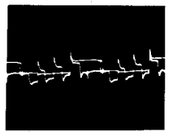
(28) SECAM
2.6Vp-p (H)



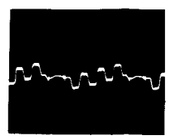
(28) NTSC
0.9Vp-p (H)



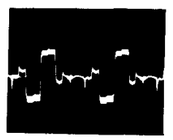
(29) PAL
2.4Vp-p (H)



(29) SECAM
2Vp-p (H)



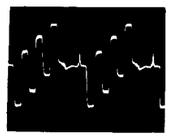
(29) NTSC
0.8Vp-p (H)



(30) PAL
1.7Vp-p (H)

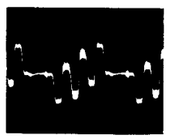
(30) SECAM
2.2Vp-p (H)

(30) NTSC
0.6Vp-p (H)



(31) PAL
2.5Vp-p (H)

(31) SECAM
1Vp-p (H)



(31) NTSC
3.6Vp-p (H)

(32) PAL
1.6Vp-p (H)

(32) SECAM
0.8Vp-p (H)

(32) NTSC
1Vp-p (H)

(33) PAL, SECAM, NTSC
16Vp-p (H)

(34) PAL, SECAM, NTSC
33Vp-p (V)

(35) PAL, SECAM, NTSC
114Vp-p (H)

(36) PAL
0.66Vp-p (H)

(36) SECAM
1Vp-p (H)

(36) NTSC
0.9Vp-p (H)

(37) PAL
3.4Vp-p (H)

(37) SECAM
2.8Vp-p (H)

(37) NTSC
2.6Vp-p (H)

(38) PAL
4.2Vp-p (H)

(38) SECAM
3.7Vp-p (H)

(38) NTSC
3.6Vp-p (H)

(39) PAL
1.9Vp-p (H)

(39) SECAM
1.6Vp-p (H)

(39) NTSC
1.6Vp-p (H)

(40) PAL
6.2Vp-p (H)

(40) SECAM, NTSC
6.8Vp-p (H)

(41) PAL
9.6Vp-p (H)

(41) SECAM
8Vp-p (H)

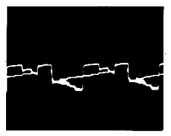
(41) NTSC
7.6Vp-p (H)

(42) PAL
5.6Vp-p (H)

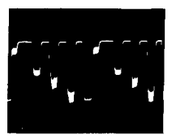
(42) SECAM
4.4Vp-p (H)

(42) NTSC
4.6Vp-p (H)

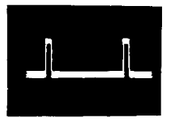
(43) PAL
10.4Vp-p (H)



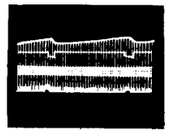
(45) SECAM
1.6Vp-p (H)



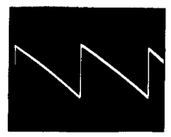
(47) NTSC
180Vp-p (H)



(50) 0.7Vp-p (V)



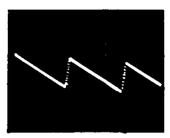
(57) 2Vp-p (V)



(64) 2.4Vp-p (V)

(71) 2.4Vp-p (V)

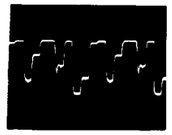
(78) 17Vp-p (H)



(85) 1.6Vp-p (V)

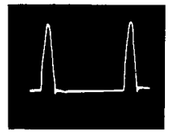
(43) SECAM
10Vp-p (H)

(45) NTSC
1.7Vp-p (H)

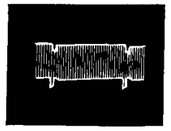


(48) PAL
165Vp-p (H)

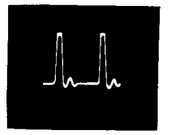
(51) 4.6Vp-p (V)



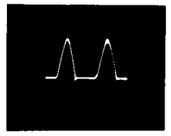
(58) 3.3Vp-p (H)



(65) 0.27Vp-p (V)



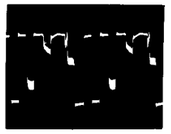
(72) 9.2Vp-p (H)



(79) 450Vp-p (H)

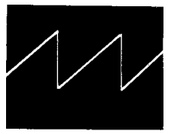
(86) 18Vp-p (V)

(43) NTSC
9.4Vp-p (H)

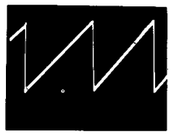


(46) PAL
4.8Vp-p (H)

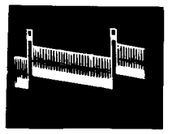
(48) SECAM
150Vp-p (H)



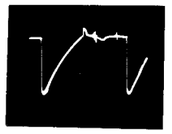
(52) 3.1Vp-p (V)



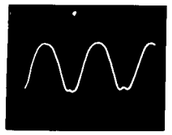
(59) 3Vp-p (V)



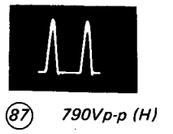
(66) 112Vp-p (V)



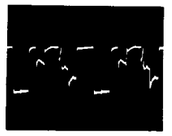
(73) 5.8Vp-p (H)



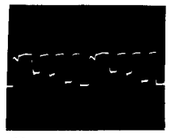
(80) 12.6Vp-p (H)



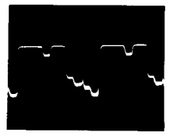
(87) 790Vp-p (H)



(44) PAL
3.1Vp-p (H)

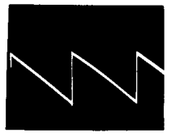


(46) SECAM
2Vp-p (H)



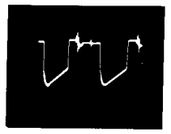
(48) NTSC
150Vp-p (H)

(53) 3Vp-p (V)

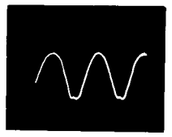


(60) 2.4Vp-p (V)

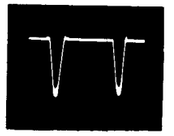
(67) 2.4Vp-p (V)



(74) 4Vp-p (H)



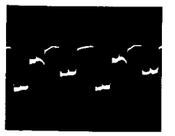
(81) 12.6Vp-p (H)



(88) 100Vp-p (H)

(44) SECAM
1.4Vp-p (H)

(46) NTSC
2Vp-p (H)



(44) NTSC
1.4Vp-p (H)

(49) PAL
145Vp-p (H)

(47) PAL
190Vp-p (H)

(49) SECAM
150Vp-p (H)

(45) PAL
3.6Vp-p (H)

(47) SECAM
185Vp-p (H)

(49) NTSC
130Vp-p (H)

(54) 0.55Vp-p (H)

(61) 0.27Vp-p (V)

(68) 2.4Vp-p (V)

(75) 190Vp-p (H)

(82) 33.5Vp-p (H)

(89) 33Vp-p (H)

(55) 0.27Vp-p (V)

(62) 106Vp-p (V)

(69) 0.27Vp-p (V)

(76) 14.2Vp-p (H)

(83) 37Vp-p (H)

(90) 37Vp-p (H)

(56) 3Vp-p (V)

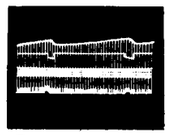
(63) 2.4Vp-p (V)

(70) 86Vp-p (V)

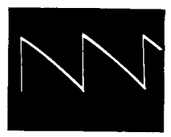
(77) 88Vp-p (H)

(84) 98Vp-p (H)

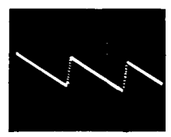
(91) 0.5Vp-p (V)

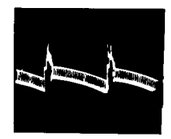

57 2Vp-p (V)


64 2.4Vp-p (V)

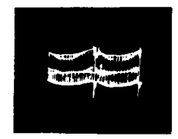

71 2.4Vp-p (V)

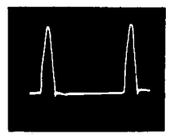

78 17Vp-p (H)

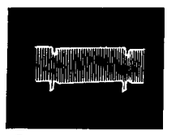

85 1.6Vp-p (V)

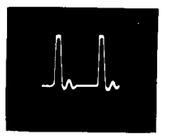

92 3Vp-p (V)

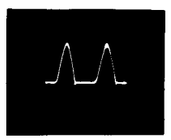

99 3.4Vp-p (V)


106 1.4Vp-p (H)

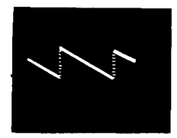

58 3.3Vp-p (H)


65 0.27Vp-p (V)

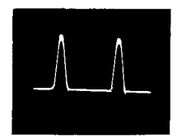

72 9.2Vp-p (H)

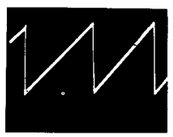

79 450Vp-p (H)

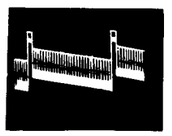

86 18Vp-p (V)

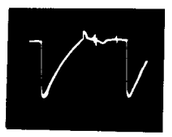

93 1.6Vp-p (V)

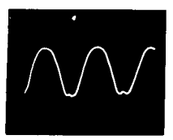

100 1.6Vp-p (V)

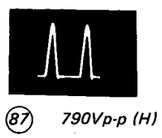

107 850Vp-p (H)


59 3Vp-p (V)


66 112Vp-p (V)


73 5.8Vp-p (H)

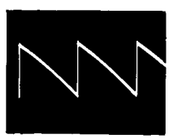

80 12.6Vp-p (H)

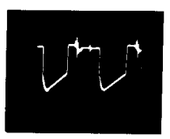

87 790Vp-p (H)

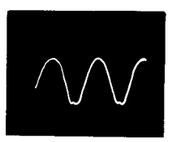

94 18Vp-p (V)

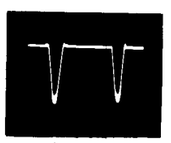

101 18Vp-p (V)

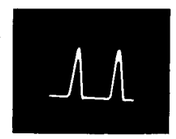

60 2.4Vp-p (V)


67 2.4Vp-p (V)

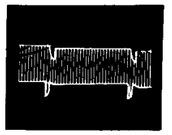

74 4Vp-p (H)

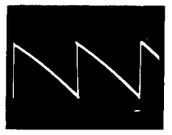

81 12.6Vp-p (H)

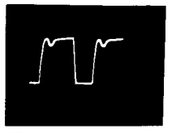

88 100Vp-p (H)

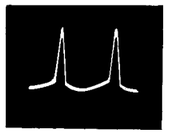

95 790Vp-p (H)

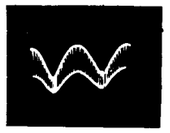

102 790Vp-p (H)


61 0.27Vp-p (V)

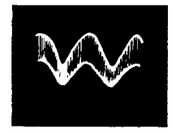

68 2.4Vp-p (V)

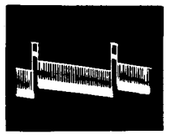

75 190Vp-p (H)

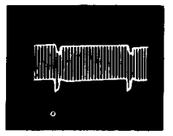

82 33.5Vp-p (H)


89 33Vp-p (H)


96 38Vp-p (V)


103 37Vp-p (H)


62 106Vp-p (V)


69 0.27Vp-p (V)


76 14.2Vp-p (H)

83 37Vp-p (H)

90 37Vp-p (H)

97 0.9Vp-p (V)

104 0.9Vp-p (V)

63 2.4Vp-p (V)

70 86Vp-p (V)

77 88Vp-p (H)

84 98Vp-p (H)

91 0.5Vp-p (V)

98 0.4Vp-p (V)

105 0.23Vp-p (V)

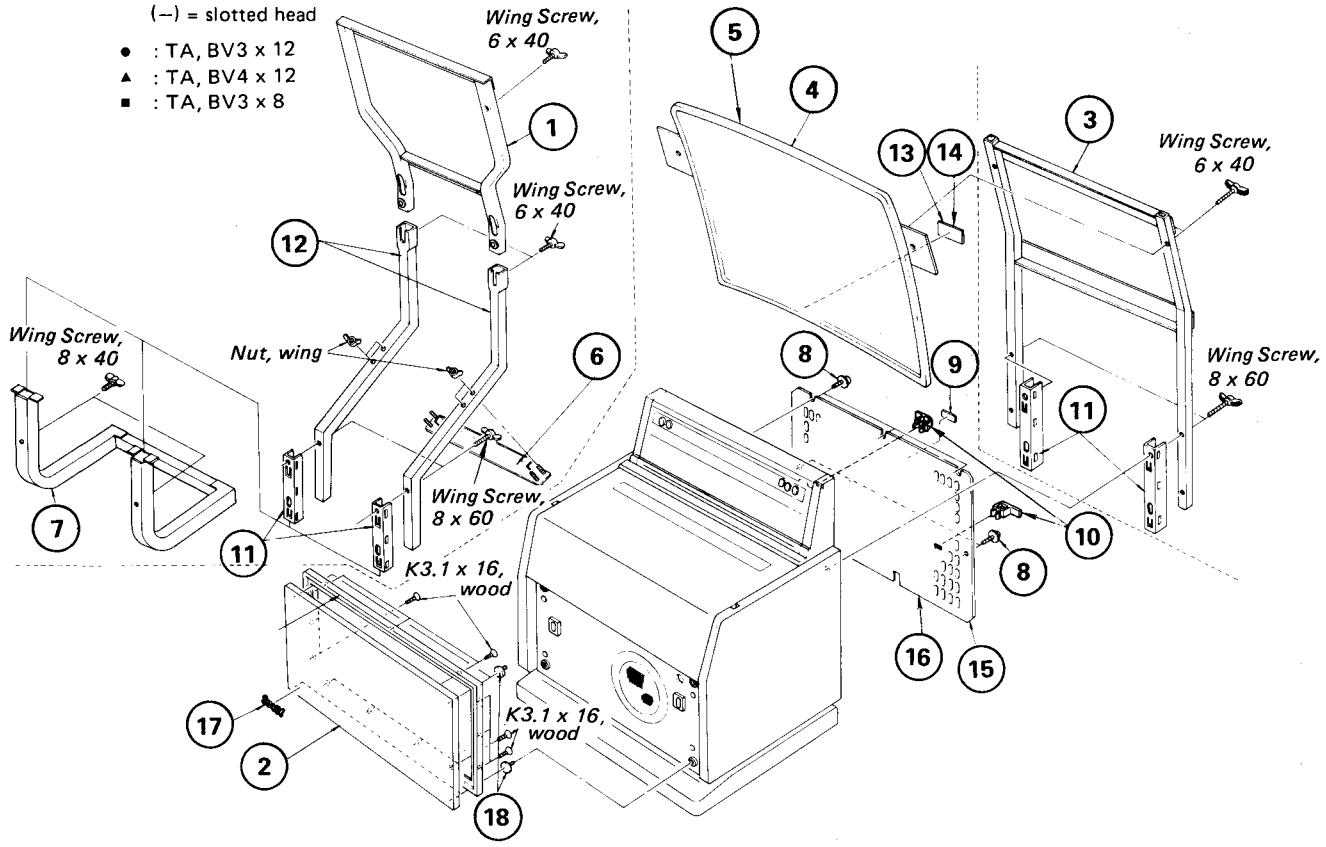
SECTION 6
EXPLODED VIEWS

(1)

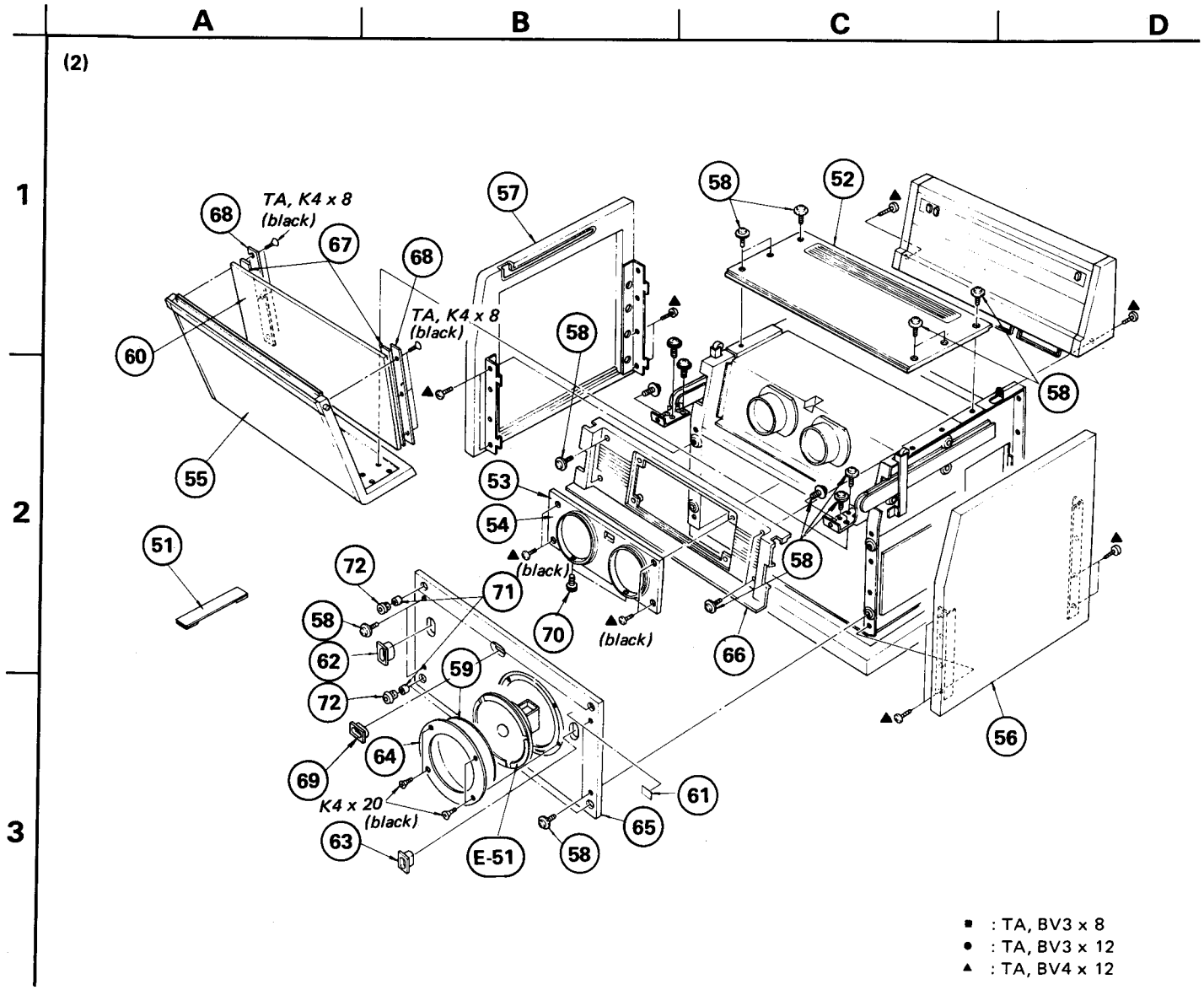
Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note:
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.
  (–) = slotted head
- ● : TA, BV3 x 12
- ▲ : TA, BV4 x 12
- ■ : TA, BV3 x 8

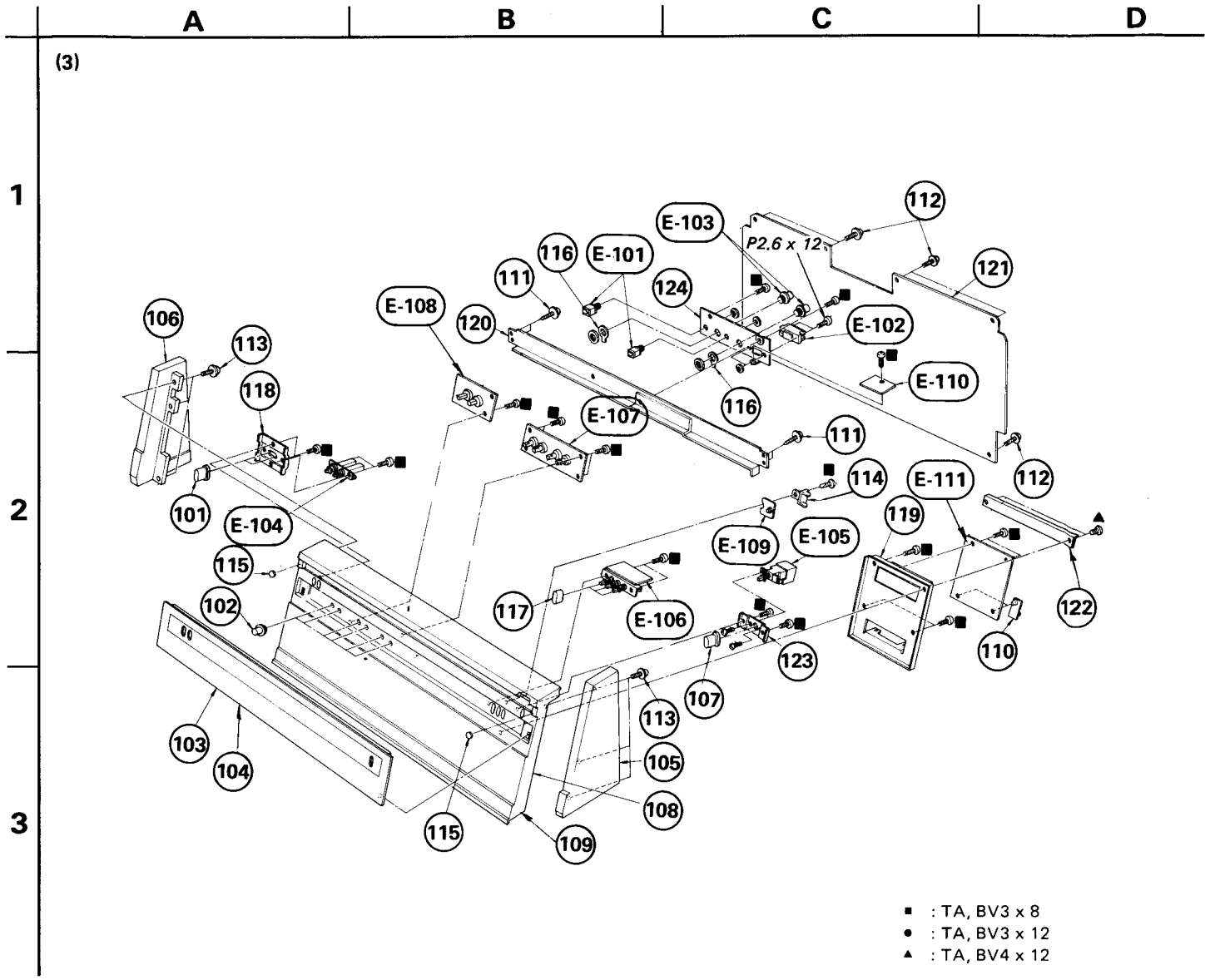
- As to the part numbered with E-, refer to the electrical parts list.
- Items marked "♦" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The construction parts of an assembled part are indicated with a collation number in the remark column.



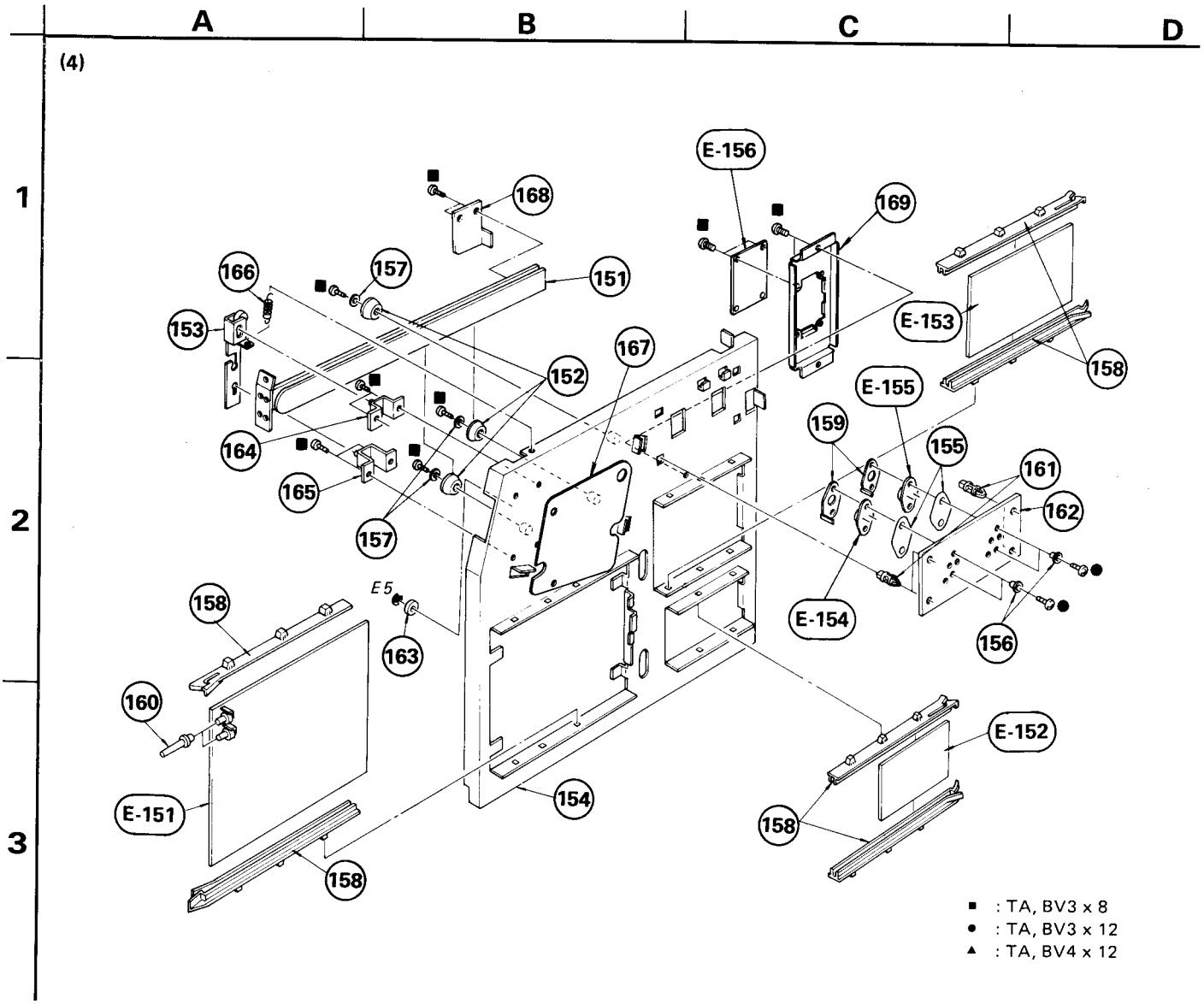
No.	Part No.	Description	Remark
1	X-4332-203-0	Pole Ass'y, screen (KP-7210PS)	
2	X-4332-204-0	Grille Ass'y, speaker	
3	X-4332-206-0	Pole Ass'y, screen (KP-5010PS)	
4	X-4332-208-0	Screen Ass'y (KP-5010PS)	
5	X-4332-210-0	Screen Ass'y (KP-7210PS)	
6	X-4332-214-0	Stay (C) Ass'y, screen pole (KP-7210PS)	
7	X-4332-243-0	Pole Ass'y (KP-7210PS)	
8	4-302-404-00	Screw, self-tapping; 4 x 16	
9	4-302-759-00	Label, serial number	
10	♦ 4-304-418-00	Clamp, cord	
11	4-332-252-00	Holder, screen pole	
12	4-332-274-00	Pole (B), screen (KP-7210PS)	
13	4-333-906-01	Label, screen (KP-7210PS)	
14	4-333-907-00	Label, screen (KP-5010PS)	
15	4-333-911-00	Cover (main), rear (KP-5010PS)	
16	4-333-912-00	Cover (main), rear (KP-7210PS)	
17	4-849-833-00	Emblem, SONY	
18	4-855-710-00	Strike	



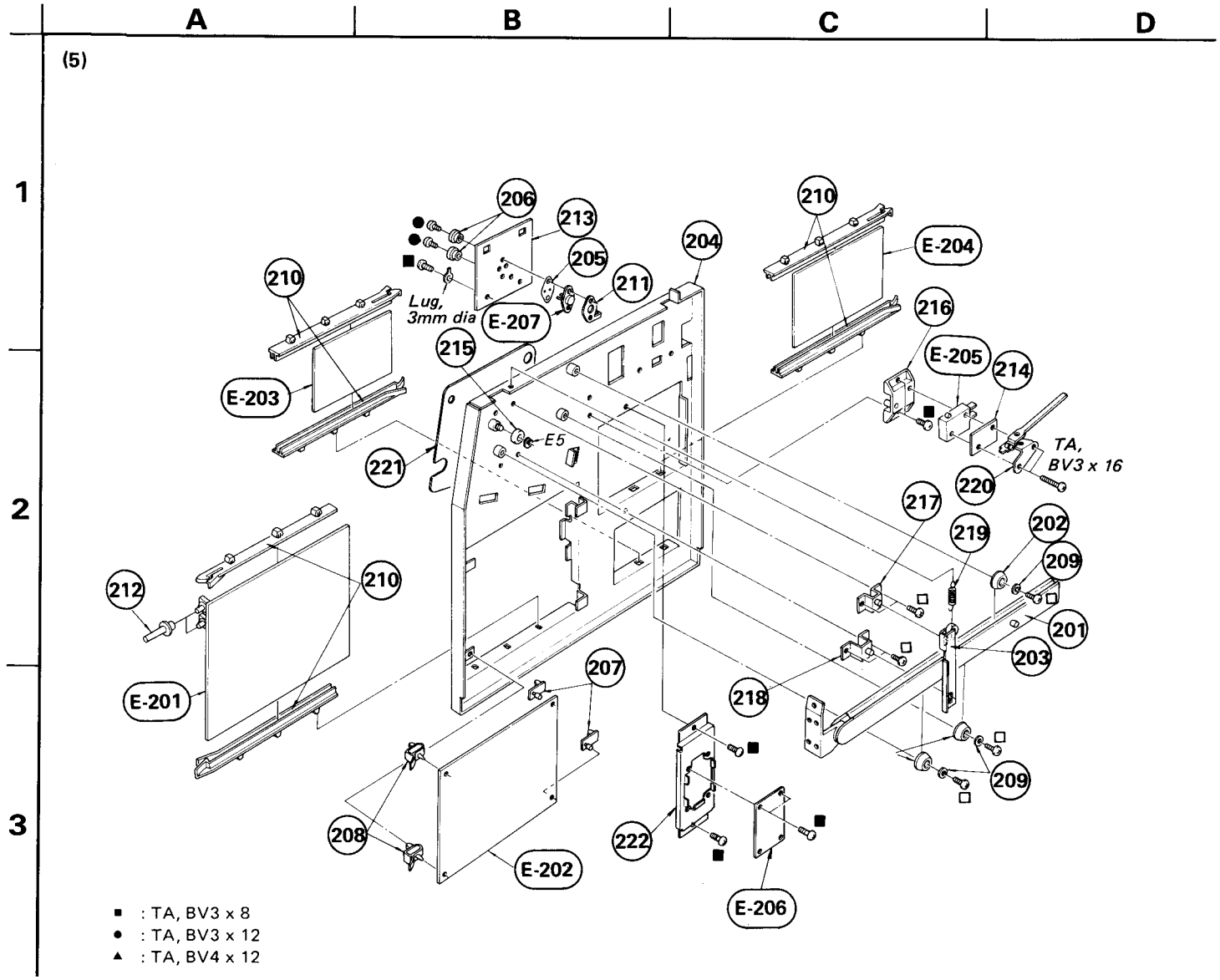
No.	Part No.	Description	Remark	No.	Part No.	Description	Remark
51	X-4309-608-0	Permalloy Ass'y, convergence		62	4-332-222-02	Holder, control	
52	X-4332-207-0	Panel Ass'y, top		63	4-332-222-12	Holder, control	
53	X-4332-224-0	Panel (C) Ass'y, lens (KP-5010PS)		64	4-332-235-00	Holder, speaker	
54	X-4332-225-0	Panel (D) Ass'y, lens (KP-7210PS)		65	4-332-258-00	Board, baffle; speaker	
55	X-4332-230-0	Cover Ass'y, reflector		66	4-332-271-00	Panel, front	
56	X-4332-231-2	Board Ass'y (right), side		67	4-332-298-00	Cushion, mirror	
57	X-4332-232-2	Cover Ass'y (left), side		68	4-333-227-00	Holder, R.M.	
58	4-304-494-21	Screw, self-tapping		69	4-333-932-02	Holder, control	
59	4-332-207-00	Net, ornamental; speaker		70	4-333-934-01	Screw, ornamental	
60	4-332-215-00	Mirror, reflection		71	4-843-804-11	Catch	
61	4-332-221-00	Label, hatch switch		72	4-843-805-00	Holder, catch	



No.	Part No.	Description	Remark
101	X-4332-217-0	Push Button (E) Ass'y	
102	X-4332-218-0	Knob Ass'y	
103	X-4332-219-3	Lid Ass'y, sub control (KP-5010PS)	
104	X-4332-219-4	Lid Ass'y, sub control (KP-7210PS)	
105	X-4332-226-2	Plate (right) Ass'y, side	
106	X-4332-227-2	Plate (left) Ass'y, side	
107	X-4332-237-0	Push Button (A) Ass'y	
108	X-4332-251-0	Panel Complete Ass'y, control (KP-7210PS)	
109	X-4332-251-2	Panel Complete Ass'y, control (KP-5010PS)	
110	3-701-832-00	Hinge, circuit board	
111	3-701-910-00	Screw, special	
112	4-302-404-00	Screw, self-tapping; 4 x 16	
113	4-309-749-00	Screw, self-tapping; 4 x 20	
114	4-314-805-00	Holder, HE board	
115	4-314-871-00	Cushion	
116	4-325-529-00	Terminal, connector	
117	4-325-608-11	Button, sensor	
118	4-332-286-00	Bracket, line switch	
119	4-333-248-00	Bracket, Q	
120	4-333-250-00	Stay, control panel	
121	4-333-258-00	Cover, control rear	
122	4-333-297-00	Stay, reforming	
123	4-333-904-00	Bracket, power switch	
124	4-333-910-00	Board, terminal; video	

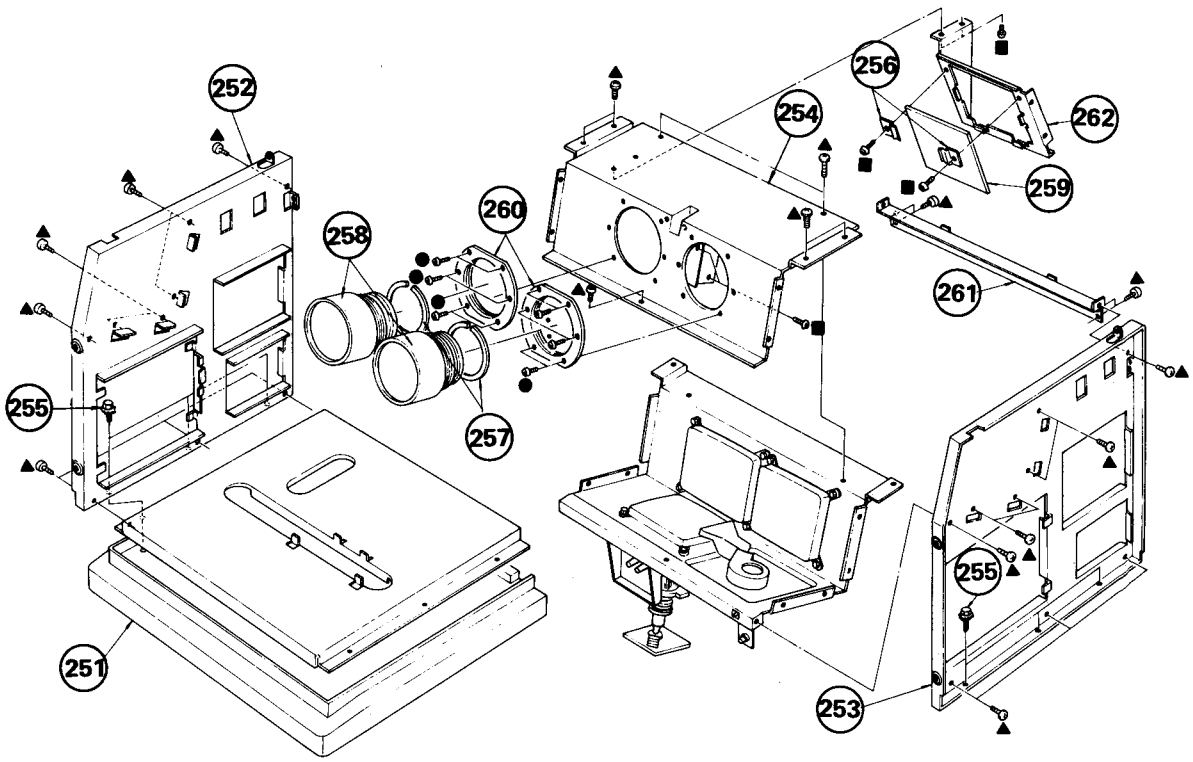


No.		Part No.	Description	Remark
151		A-1450-041-A	Arm (L) Ass'y	
152	▲	X-4332-221-0	Roller Ass'y	
153		X-4332-229-0	Stopper Ass'y (left)	
154	▲	X-4332-233-0	Chassis Ass'y (left), side	
155		3-701-353-00	Spacer, mica	
156		3-701-609-00	Bushing (B)	
157		4-008-449-00	Spacer, bracket	
158	▲	4-024-014-00	Guide, PC board	
159	▲	4-314-938-01	Retainer (TO-3), transistor	
160		4-318-348-00	Knob, V. HOLD	
161	▲	4-332-236-00	Support, heat sink	
162	▲	4-332-240-00	Heat Sink (B)	
163		4-332-277-00	Roller, stopper	
164	▲	4-333-229-00	Bracket (A), guide	
165	▲	4-333-230-00	Bracket (B), guide	
166		4-333-234-00	Spring (B), coil	
167		4-333-252-00	Sheet, side (left)	
168		4-333-288-00	Plate, cushion	
169	▲	4-333-920-02	Bracket, BC	



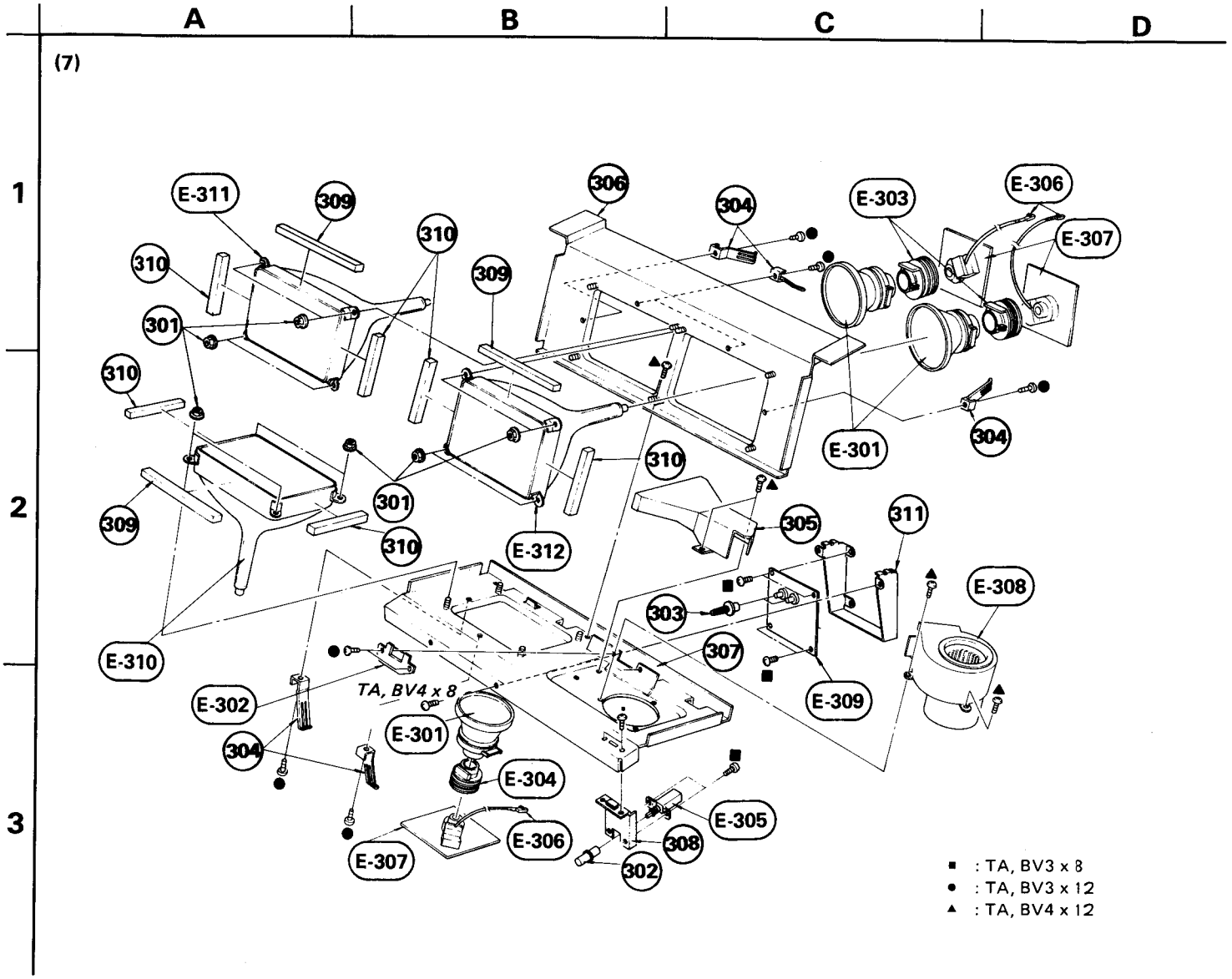
No.		Part No.	Description	Remark
201		A-1450-042-A	Arm (R) Ass'y	
202	●	X-4332-221-0	Roller Ass'y	
203		X-4332-228-0	Stopper Ass'y (right)	
204	●	X-4332-234-0	Chassis Ass'y (right), side	
205		2-825-006-00	Spacer, mica	
206		3-701-609-00	Bushing (B)	
207	●	3-701-832-00	Hinge, circuit board	
208	●	3-703-141-00	Holder, PCB	
209		4-008-449-00	Spacer, bracket	
210	●	4-024-014-00	Guide, PC board	
211	●	4-309-762-00	Retainer (MD-17), transistor	
212		4-318-348-00	Knob, V. HOLD	
213	●	4-332-206-00	Heat Sink (A)	
214	●	4-332-216-00	Insulator, mirror switch	
215		4-332-277-00	Roller, stopper	
216		4-332-278-00	Holder, switch; micro	
217	●	4-333-229-00	Bracket (A), guide	
218	●	4-333-230-00	Bracket (B), guide	
219		4-333-234-00	Spring (B), coil	
220		4-333-243-00	Actuator, VAM35	
221		4-333-251-00	Sheet, side (right)	
222	●	4-333-920-00	Bracket, BC	

(6)

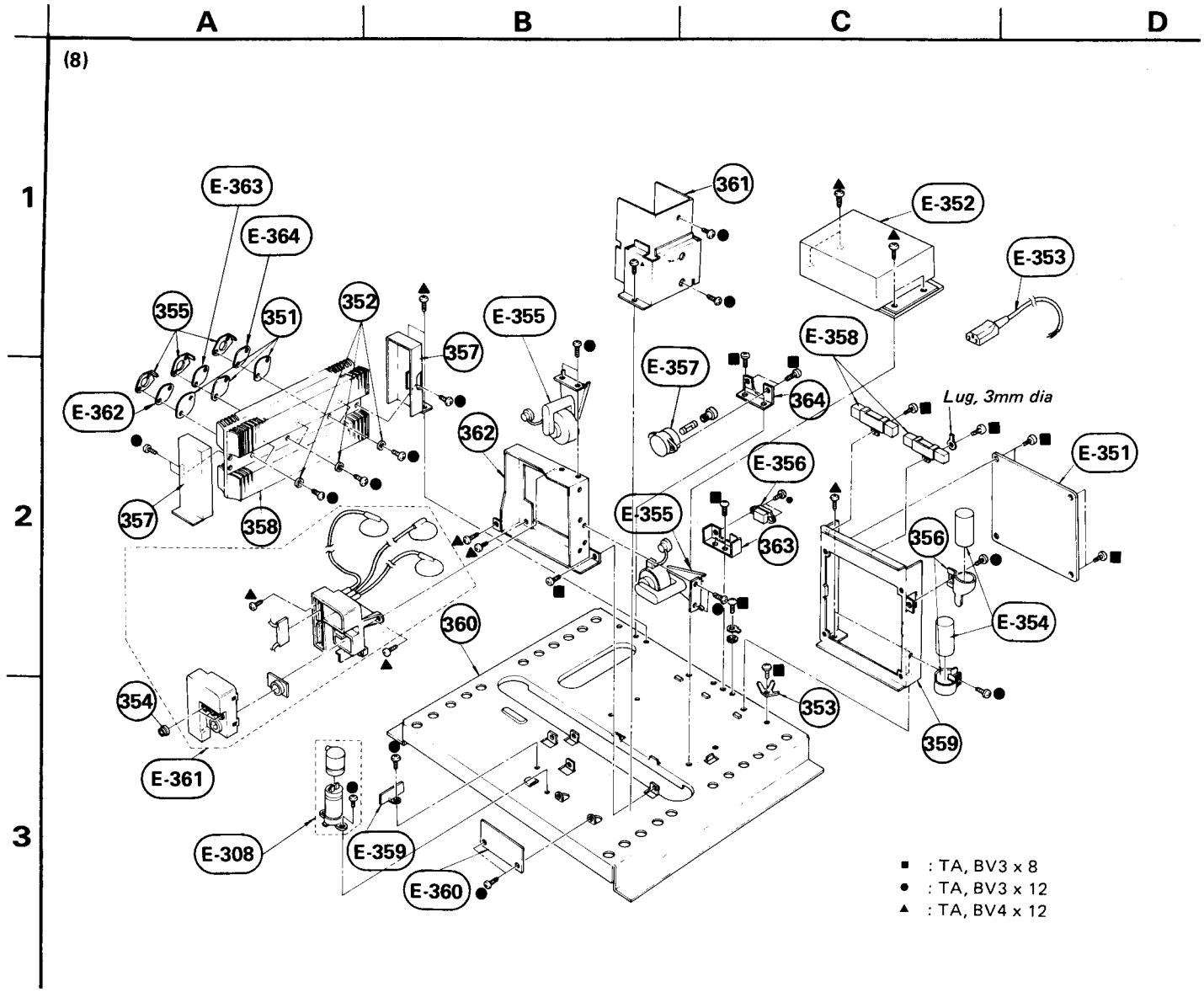


■ : TA, BV3 x 8
● : TA, BV3 x 12
▲ : TA, BV4 x 12

No.		Part No.	Description	Remark
251		X-4332-209-2	Base Ass'y	
252	●	X-4332-233-0	Chassis Ass'y (left), side	
253	●	X-4332-234-0	Chassis Ass'y (right), side	
254	●	X-4332-235-3	Bracket Ass'y, lens	
255		3-703-243-00	Screw, claw	
256	●	4-332-211-00	Retainer, DM	
257	●	4-332-212-00	Ring, lens stopper	
258		4-332-237-00	Lens (734)	
259		4-332-238-00	Mirror	
260	●	4-332-239-00	Holder, lens	
261		4-333-205-00	Stay, rear	
262	●	4-333-249-00	Bracket, DM	



No.		Part No.	Description	Remark
301		4-304-749-00	Nut, flange	
302		4-312-823-11	Knob, auto	
303		4-318-348-00	Knob, V. HOLD	
304		4-332-209-00	Spring	
305	⚷	4-332-253-00	Duct, air	
306	⚷	4-332-267-00	Bracket (B), CRT	
307	⚷	4-332-268-00	Bracket (A), CRT	
308	⚷	4-333-226-00	Bracket, hatch switch	
309		4-333-228-00	Cushion, CRT	
310		4-333-228-11	Cushion, CRT	
311	⚷	4-333-933-00	Bracket, DE	



No.		Part No.	Description	Remark
351		3-701-353-00	Spacer, mica	
352		3-701-609-00	Bushing (B)	
353	⚫	4-303-793-00	Terminal, ground	
354	⚠	4-308-858-00	Cap, lead	
355	⚫	4-314-938-01	Retainer (TO-3), transistor	
356	⚫	4-324-107-00	Holder, electrolytic capacitor	
357	⚫	4-332-234-00	Bracket, heat sink	
358	⚫	4-332-254-00	Heat Sink (C)	
359	⚫	4-332-255-00	Bracket (F)	
360	⚫	4-332-266-00	Chassis, bottom	
361	⚫	4-332-269-00	Shield, HV	
362	⚫	4-332-270-00	Bracket, HV	
363		4-333-903-00	Holder, 3P inlet	
364	⚫	4-333-905-00	Holder, socket	

SECTION 7
ELECTRICAL PARTS LIST

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note:

- ⇒ : Due to standardization, interchangeable replacements may be substituted for parts specified in the diagrams.
- Items marked "♦" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The components identified by ⊠ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- ※ : selected to yield optimum performance.

CAPACITORS

- All capacitors are in μF and ceramic unless otherwise noted. 50WV or less are not indicated except for electrolytics. p : μμF, elect : electrolytic

RESISTORS

- All resistors are in ohms. Common ¼W carbon resistors are omitted. Refer to the list on the last page for their part numbers.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
  kΩ : 1000Ω, MΩ : 1000kΩ

COILS

- All coils are microinductors unless otherwise noted.

BA BOARD

Ref. No.	Part No.	Description			Remark
	♦A-1130-083-A	BA Board, complete			E-204
		CAPACITORS			
C301	1-121-421-00	220	16V	elect	
C302	1-121-410-00	47	25V	elect	
C303	1-121-398-00	10	25V	elect	
C304	1-108-587-00	0.022		mylar	
C305	1-108-421-00	0.01	200V	mylar	
C306–308	1-108-587-00	0.022		mylar	
C309	1-108-804-00	0.01		mylar	
C310	1-102-836-00	470p			
C311, 312	1-108-792-00	0.001		mylar	
C313	1-121-404-00	33	25V	elect	
C314	1-102-971-00	82p			
C315	1-102-973-00	100p			
C316, 317	1-121-404-00	33	25V	elect	
C318	1-121-398-00	10	25V	elect	
C319	1-101-888-00	68p			
C320, 321	1-121-391-00	1	50V	elect	
C322	1-108-381-00	0.022	100V	mylar	
C323	1-108-369-00	0.0022	100V	mylar	
C324	1-101-361-00	150p			
C325	1-121-398-00	10	25V	elect	
C326	1-102-976-00	180p			
C327	1-102-971-00	82p			
C328	1-108-792-00	0.001		mylar	
C329	1-121-398-00	10	25V	elect	
C330	1-101-361-00	150p			
C331	1-123-351-00	0.47	50V	elect	
C332	1-121-404-00	33	25V	elect	
C333	1-123-351-00	0.47	50V	elect	
C334	1-123-252-00	1	160V	elect	
C335	1-108-587-00	0.022		mylar	
		DIODES			
D301–309	8-719-815-55	1S1555			
⇒D310	8-719-200-02	10E2			
		COILS			
L301	1-407-191-XX	470μH			
L302	1-407-167-XX	68μH			
		TRANSISTORS			
Q301	8-724-375-01	2SC403C			
⇒Q302–307	8-729-663-47	2SC1364			
⇒Q308	8-729-612-77	2SA1027R			
⇒Q309–315	8-729-663-47	2SC1364			
⇒Q316	8-729-612-77	2SA1027R			

Ref. No.	Part No.	Description			Remark
⇒Q317	8-729-663-47	2SC1364			
⇒Q318	8-729-612-77	2SA1027R			
⇒Q319–325	8-729-663-47	2SC1364			
⇒Q326	8-729-612-77	2SA1027R			
⇒Q327	8-729-663-47	2SC1364			
⇒Q328	8-729-612-77	2SA1027R			
		RESISTORS			
R307	1-244-875-00	1.2k	½W	carbon	
R346	1-244-869-00	680	½W	carbon	
R386	1-211-490-00	4.7	¼W (nonflammable)	carbon	
		BB BOARD			
	♦A-1135-078-A	BB Board, complete			E-202
		CAPACITORS			
C3101	1-102-676-00	68p			
C3102	1-101-004-00	0.01			
C3103,3104	1-102-662-00	7p			
C3105	1-102-858-00	10p			
C3106	1-102-882-00	4p			
C3107	1-101-004-00	0.01			
C3108	1-123-351-00	0.47	50V	elect	
C3109	1-101-880-00	47p			
C3110	1-101-004-00	0.01			
C3111	1-123-351-00	0.47	50V	elect	
C3112	1-102-965-00	390p			
C3113	1-101-004-00	0.01			
C3114	1-102-516-00	27p			
C3115,3116	1-102-529-00	100p			
C3117	1-123-318-00	33	16V	elect	
C3118	1-102-531-00	150p			
C3119	1-102-516-00	27p			
C3120,3121	1-102-529-00	100p			
C3122	1-102-531-00	150p			
C3123	1-102-973-00	100p			
C3124	1-123-316-00	10	16V	elect	
C3125–C3127	1-102-888-00	150p			
C3128,3129	1-101-004-00	0.01			
C3130	1-123-351-00	0.47	50V	elect	
C3131	1-101-004-00	0.01			
C3132	1-123-316-00	10	16V	elect	
C3133	1-123-355-00	4.7	50V	elect	
C3134	1-101-004-00	0.01			
C3135,3136	1-102-820-00	330p			
C3137,3138	1-101-004-00	0.01			
C3139	1-101-006-00	0.047			
C3140–C3142	1-101-004-00	0.01			
C3143	1-102-850-00	56p			
C3144	1-101-004-00	0.01			
C3145	1-123-317-00	22	16V	elect	
C3146	1-123-355-00	4.7	50V	elect	
C3147	1-123-316-00	10	16V	elect	
C3148	1-123-352-00	1	50V	elect	
C3149	1-123-355-00	4.7	50V	elect	
C3150	1-123-316-00	10	16V	elect	
C3151	1-101-006-00	0.047			
C3152–C3154	1-102-888-00	150p			
C3155	1-101-004-00	0.01			
C3156	1-102-973-00	100p			
C3157,3158	1-101-004-00	0.01			
C3159,3160	1-123-352-00	1	50V	elect	
C3161	1-102-959-00	22p			
C3162	1-101-884-00	56p			
C3163	1-108-365-00	0.001	100V	mylar	
C3164,3165	1-123-316-00	10	16V	elect	
C3166	1-108-365-00	0.001	100V	mylar	
C3167	1-101-004-00	0.01			
C3168	1-123-316-00	10	16V	elect	
C3169	1-101-884-00	56p			
C3170	1-102-959-00	22p			
C3171	1-123-351-00	0.47	50V	elect	

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Ref. No.	Part No.	Description			Remark
C3172	1-102-961-00	27p			
C3173	1-123-352-00	1	50V	elect	
C3174	1-101-004-00	0.01			
C3175	1-102-527-00	82p			
C3176	1-102-510-00	12p			
C3177	1-101-004-00	0.01			
C3178	1-101-888-00	68p			
C3179	1-102-074-00	0.001			
C3180	1-102-883-00	27p			
C3181	1-102-516-00	27p			
C3182	1-123-329-00	10	25V	elect	
C3183	1-161-023-00	0.068			
C3184	1-108-638-00	0.1	100V	mylar	
C3185	1-123-316-00	10	16V	elect	
C3186	1-108-638-00	0.1	100V	mylar	
C3187	1-123-316-00	10	16V	elect	
C3188	1-123-317-00	22	16V	elect	
C3189	1-123-351-00	0.47	50V	elect	
C3190	1-102-973-00	100p			
C3191	1-102-816-00	120p			
C3192	1-102-963-00	33p			
C3193	1-123-329-00	10	25V	elect	
C3194	1-123-316-00	10	16V	elect	
C3195	1-101-804-00	10p	500V		
C3196	1-123-319-00	47	16V	elect	
C3197	1-123-333-00	100	25V	elect	
C3198	1-161-202-00	0.01			
C3199	1-102-963-00	33p			
C3200	1-123-316-00	10	16V	elect	
C3201	1-123-351-00	0.47	50V	elect	
C3202	1-102-824-00	470p			
C3203	1-123-351-00	0.47	50V	elect	
C3204	1-102-824-00	470p			
C3205	1-123-351-00	0.47	50V	elect	
C3206	1-102-824-00	470p			
C3207	1-123-332-00	47	25V	elect	
C3208,3209	1-102-816-00	120p			
C3210	1-123-331-00	33	25V	elect	
C3211	1-102-963-00	33p			

Ref. No.	Part No.	Description	Remark
C3212	1-101-006-00	0.047	
CV3101	1-141-147-XX	Trimmer, 15p	
		DIODES	
D3101–D3108	8-719-815-55	1S1555	
⇒D3109	8-719-320-11	HF1A	
D3110–D3113	8-719-815-55	1S1555	
DL3101	1-415-101-00	Delay Line	
DL3102	1-415-122-00	Delay Line, 1H DELAY	
		ICS	
IC3101	8-759-906-40	TCA640	
IC3102	8-759-906-50	TCA650	
IC3103	8-759-905-40	TBA540	
IC3104	8-759-906-60	TCA660B	
		COILS	
L3101	1-407-163-XX	33μH	
L3102	1-407-189-XX	8.2μH	
L3103	1-407-164-XX	39μH	
L3104,3105	1-407-172-XX	180μH	
L3106	1-407-696-00	18μH	
		TRANSISTORS	
⇒Q3101–⇒Q3110	8-729-663-47	2SC1364	
⇒Q3111	8-729-612-77	2SA1027R	
⇒Q3112,3113	8-729-663-47	2SC1364	
⇒Q3114,3115	8-729-612-77	2SA1027R	
⇒Q3116–⇒Q3118	8-729-663-47	2SC1364	
⇒Q3119,3120	8-729-612-77	2SA1027R	
Q3121	8-724-375-01	2SC403C	
⇒Q3122,3123	8-729-663-47	2SC1364	
Q3124	8-760-335-10	2SC1474	
⇒Q3125	8-729-612-77	2SA1027R	

Ref. No.	Part No.	Description	Remark
Q3126	8-760-413-10	2SC1475	
Q3127	8-724-375-01	2SC403C	
⇒Q3128	8-729-612-77	2SA1027R	
Q3129	8-760-413-10	2SC1475	
Q3130	8-724-375-01	2SC403C	
⇒Q3131	8-729-612-77	2SA1027R	
Q3132	8-760-413-10	2SC1475	
Q3133	8-724-375-01	2SC403C	
⇒Q3134–⇒Q3137	8-729-663-47	2SC1364	

RESISTORS

R3223	1-212-360-00	1	1W	metal oxide (nonflammable)
R3224	1-206-475-00	33	2W	metal oxide (nonflammable)
R3233	1-211-929-00	82	1/8W	carbon (nonflammable)
R3236	1-213-135-00	220	1W	metal oxide (nonflammable)
R3246	1-211-929-00	82	1/8W	carbon (nonflammable)
R3247	1-213-135-00	220	1W	metal oxide (nonflammable)
R3257	1-246-988-00	56	1/8W	carbon (nonflammable)
R3258	1-213-133-00	150	1W	metal oxide (nonflammable)
RV3101	1-224-641-XX	470, adjustable; BIAS		
RV3102	1-224-643-XX	2.2k, adjustable; R-Y LEVEL		
RV3103	1-224-643-XX	2.2k, adjustable; SMB		
RV3104	1-224-642-XX	1k, adjustable; U. PHASE		
RV3105	1-224-645-XX	10k, adjustable; KILL		
RV3106	1-224-644-XX	4.7k, adjustable; ACC		
RV3107	1-224-641-XX	470, adjustable; BKG		
RV3108	1-221-970-XX	500, adjustable; R. DRIVE		
RV3109	1-221-970-XX	500, adjustable; G. DRIVE		
RV3110	1-221-970-XX	500, adjustable; B. DRIVE		

TRANSFORMERS

T3101	1-425-784-00	T.O.T
T3102,3103	1-409-193-00	3.58MHz Trap
T3104	1-404-076-00	R-Y Discri
T3105	1-404-076-21	B-Y Discri
T3106	1-404-075-00	BELL
T3107	1-425-928-00	DAT
T3108	1-404-075-00	IDT
T3109,3110	1-425-970-00	CWT
T3111	1-403-843-00	SIFT-3, V-PHASE
TH3101	1-800-198-XX	Thermister, S-1000
X3101	1-527-274-00	Crystal Oscillator

BC BOARD

			Remark
♦	A-1130-094-A	BC Board, complete	E-156

CAPACITORS

C9501	1-102-949-00	12p		
C9502–C9504	1-108-381-00	0.022	100V	mylar
C9505	1-123-316-00	10	16V	elect
C9506	1-108-381-00	0.022	100V	mylar
C9507,9508	1-123-352-00	1	50V	elect
C9509	1-123-316-00	10	16V	elect
C9510	1-108-381-00	0.022	100V	mylar
C9511	1-123-331-00	33	25V	elect

DIODES

D9501,9502	8-719-815-55	1S1555

COIL

L9501	1-407-240-00	Inductor, variable

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Ref. No.	Part No.	Description	Remark
		TRANSISTORS	
Q9501–Q9503	8-729-663-47	2SC1364	
Q9504	8-729-612-77	2SA1027R	

C BOARD

♦	A-1330-169-A	C Board, complete	E-307
		CAPACITORS	
C701	1-123-028-00	2.2 350V elect	
C702	1-121-963-00	33 25V elect	
C703	1-102-267-00	0.0068 500V	
C704	1-102-155-00	330p 2kV	
C705	1-129-924-00	0.016 1kV film	
C706	1-102-155-00	330p 2kV	
		COILS	
L701	1-407-492-00	1mH	
L702, 703	1-407-364-00	3.3μH	
NL701	1-519-013-00	Discharge Tube	
		TRANSISTOR	
Q701	8-729-372-31	2SC1723	
		RESISTOR	
R701	1-202-615-00	56k ½W composition	
R702	1-202-631-00	270k ½W composition	
R703	1-244-921-00	100k ½W carbon	
R704	1-244-923-00	120k ½W carbon	
R706	1-206-753-00	15k 3W metal oxide (nonflammable)	
R708	1-202-573-00	1k ½W composition	
R709	1-202-629-00	220k ½W composition	
R710	1-202-573-00	1k ½W composition	
R711	1-202-639-00	560k ½W composition	
R712	1-202-583-00	2.7k ½W composition	
R713	1-202-615-00	56k ½W composition	
R714	1-247-033-00	100 1/8W carbon (nonflammable)	
	1-526-607-00	Socket, picture tube	

D BOARD

♦	A-1340-270-A	D Board, complete	E-201
		CAPACITORS	
C5501	1-121-733-00	470 25V elect	
C5502,5503	1-121-999-00	10 160V elect	
C5504	1-121-245-00	1000 16V elect	
C5505	1-121-733-00	470 25V elect	
C5507	1-121-398-00	10 25V elect	
C5508	1-102-973-00	100p	
C5509	1-123-116-00	1 160V elect	
C5510	1-108-591-00	0.033 mylar	
C5511	1-121-391-00	1 50V elect	
C5512,5513	1-121-810-00	470 50V elect	
C5514	1-131-236-00	1 25V tantalum	
C5515	1-121-391-00	1 50V elect	
C5516	1-121-396-00	4.7 50V elect	
C5517	1-102-973-00	100p	
C5518	1-123-116-00	1 160V elect	
C5519	1-108-591-00	0.033 mylar	
C5520	1-121-391-00	1 50V elect	
C5521,5522	1-121-810-00	470 50V elect	
C5523	1-131-236-00	1 25V elect	
C5524	1-121-391-00	1 50V elect	
C5525	1-121-396-00	4.7 50V elect	
C5526	1-102-973-00	100p	
C5527	1-123-116-00	1 160V elect	
C5528	1-108-591-00	0.033 mylar	
C5529	1-121-391-00	1 50V elect	

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Ref. No.	Part No.	Description			Remark
C5530,5531	1-121-810-00	470	50V	elect	
C5532	1-131-236-00	1	25V	elect	
C5533	1-121-391-00	1	50V	elect	
C5534	1-121-396-00	4.7	50V	elect	
C5535	1-121-416-00	100	25V	elect	
C5536,5537	1-108-571-00	0.0047		mylar	
C5538	1-108-563-00	0.0022		mylar	
C5539	1-102-973-00	100p			
C5540,5541	1-131-207-00	4.7	25V	elect	
C5543,5544	1-121-392-00	3.3	25V	elect	
C5545	1-108-792-00	0.001		mylar	
C5546	1-121-416-00	100	25V	elect	
C5547	1-108-792-00	0.001		mylar	
C5548	1-108-587-00	0.022		mylar	
C5550–C5552	1-108-425-00	0.022	200V	mylar	

DIODES

D5501–D5505	8-719-815-55	1S1555	
⇒D5506	8-719-931-25	EQB01-25	
⇒D5507	8-719-931-08	EQB01-08	
D5508–D5512	8-719-815-55	1S1555	
⇒D5513	8-719-931-25	EQB01-25	
⇒D5514	8-719-931-08	EQB01-08	
D5515–D5519	8-719-815-55	1S1555	
⇒D5520	8-719-931-25	EQB01-25	
⇒D5521	8-719-931-08	EQB01-08	
⇒D5522	8-719-931-05	EQB01-05	
⇒D5523	8-719-931-06	EQB01-06	
D5524	8-719-815-55	1S1555	
⇒D5525	8-719-900-93	V09C	
D5526	8-719-815-55	1S1555	

COIL

L5501	1-407-169-XX	100μH	

TRANSISTORS

⇒Q5501,5502	8-729-612-77	1SA1027R	
Q5503	8-765-170-01	2SC1962	
Q5504	8-729-307-82	2SD478	
Q5505	8-729-326-82	2SB568	
⇒Q5506	8-729-612-77	2SA1027R	
⇒Q5507,5508	8-729-663-47	2SC1364	
⇒Q5509	8-729-612-77	2SA1027R	
Q5510	8-760-413-10	2SC1475	
⇒Q5511,5512	8-729-612-77	2SA1027R	
Q5513	8-765-170-01	2SC1962	
Q5514	8-729-307-82	2SD478	
Q5515	8-729-326-82	2SB568	
⇒Q5516	8-729-612-77	2SA1027R	
⇒Q5517,5518	8-729-663-47	2SC1364	
⇒Q5519	8-729-612-77	2SA1027R	
Q5520	8-760-413-10	2SC1475	
⇒Q5521,5522	8-729-612-77	2SA1027R	
Q5523	8-765-170-01	2SC1962	
Q5524	8-729-307-82	2SD478	
Q5525	8-729-326-82	2SB568	
⇒Q5526	8-729-612-77	2SA1027R	
⇒Q5527,5528	8-729-663-47	2SC1364	
⇒Q5529	8-729-612-77	2SA1027R	
Q5530	8-760-413-10	2SC1475	
⇒Q5531,5532	8-729-663-47	2SC1364	
⇒Q5533	8-729-663-47	2SC1364	
⇒Q5534–⇒Q5536	8-729-612-77	2SA1027R	
⇒Q5539	8-729-663-47	2SC1364	
⇒Q5540	8-760-413-10	2SC1475	
⇒Q5541	8-729-612-77	2SA1027R	
Q5542	8-760-413-10	2SC1475	
Q5543–Q5545	8-729-663-47	2SC1364	
Q5546	8-760-413-10	2SC1475	

RESISTORS

Ref. No.	Part No.	Description			Remark
R5501	1-214-138-00	1.8k	1%	metal oxide	
R5502	1-247-031-00	27	1/8W	carbon (nonflammable)	
R5503	1-214-150-00	5.6k	1%	metal oxide	
R5504	1-247-031-00	27	1/8W	carbon (nonflammable)	
R5505,5506	1-214-118-00	270	1%	metal oxide	
R5507	1-214-158-00	12k	1%	metal oxide	
R5508	1-214-171-00	43k	1%	metal oxide	
R5509,5510	1-244-923-00	120k	½W	carbon	
R5512	1-246-994-00	680	1/8W	carbon (nonflammable)	
R5515,5516	1-206-759-00	27k	3W	metal oxide (nonflammable)	
R5521	1-213-154-00	8.2k	1W	metal oxide (nonflammable)	
R5525	1-214-093-00	24	1%	metal oxide	
R5526	1-214-094-00	27	1%	metal oxide	
R5527,5528	1-206-759-00	27k	3W	metal oxide (nonflammable)	
R5532,5533	1-214-123-00	430	1%	metal oxide	
R5535	1-214-138-00	1.8k	1%	metal oxide	
R5536	1-247-031-00	27	1/8W	carbon (nonflammable)	
R5537	1-214-150-00	5.6k	1%	metal oxide	
R5538	1-247-037-00	27	1/8W	carbon (nonflammable)	
R5539	1-214-158-00	12k	1%	metal oxide	
R5540	1-247-031-00	27	1/8W	carbon (nonflammable)	
R5541	1-214-171-00	43k	1%	metal oxide	
R5542,5543	1-244-923-00	120k	½W	carbon	
R5545	1-246-994-00	680	1/8W	carbon (nonflammable)	
R5548,5549	1-206-759-00	27k	3W	metal oxide (nonflammable)	
R5554	1-213-154-00	8.2k	1W	metal oxide (nonflammable)	
R5558	1-214-093-00	24	1%	metal oxide	
R5559	1-214-094-00	27	1%	metal oxide	
R5560,5561	1-206-759-00	27k	3W	metal oxide (nonflammable)	
R5565,5566	1-214-123-00	430	1%	metal oxide	
R5568	1-214-138-00	1.8k	1%	metal oxide	
R5569	1-247-031-00	27	1/8W	carbon (nonflammable)	
R5570	1-214-150-00	5.6k	1%	metal oxide	
R5571	1-247-031-00	27	1/8W	carbon (nonflammable)	
R5572	1-214-158-00	12k	1%	metal oxide	
R5573	1-247-031-00	27	1/8W	carbon (nonflammable)	
R5574	1-214-171-00	43k	1%	metal oxide	
R5575,5576	1-244-923-00	120k	½W	carbon	
R5578	1-246-994-00	680	1/8W	carbon (nonflammable)	
R5581,5582	1-206-759-00	27k	3W	metal oxide (nonflammable)	
R5587	1-213-154-00	8.2k	1W	metal oxide (nonflammable)	
R5591	1-214-093-00	24	1%	metal oxide	
R5592	1-214-094-00	27	1%	metal oxide	
R5593,5594	1-206-759-00	27k	3W	metal oxide (nonflammable)	
R5598,5599	1-214-123-00	430	1%	metal oxide	
R5601,5602	1-206-743-00	5.6k	3W	metal oxide (nonflammable)	
R5603,5604	1-247-031-00	27	1/8W	carbon (nonflammable)	
R5615	1-214-148-00	4.7k	1%	metal oxide	
R5616	1-214-154-00	8.2k	1%	metal oxide	
R5617,5618	1-214-156-00	10k	1%	metal oxide	
R5621	1-244-923-00	120k	½W	carbon	
R5622	1-244-927-00	180k	½W	carbon	
R5623	1-244-857-00	220	½W	carbon	
R5624	1-214-158-00	12k		metal oxide	
R5626	1-214-158-00	12k		metal oxide	
R5627	1-214-146-00	3.9k		metal oxide	
R5637	1-244-877-00	1.5k	½W	carbon	

Ref. No.	Part No.	Description	Remark
R5638	1-206-656-00	470 2W metal oxide (nonflammable)	
R5639	1-247-031-00	27 1/8W carbon (nonflammable)	
R5646	1-206-656-00	470 2W metal oxide (nonflammable)	
R5647	1-247-031-00	27 1/8W carbon (nonflammable)	
RV5501	1-224-641-00	470, adjustable; V. SIZE (R)	
RV5502	1-224-644-00	4.7k, adjustable; V. CENT (R)	
RV5503	1-221-970-XX	500, adjustable; V. SIZE (G)	
RV5504	1-221-970-XX	500, adjustable; V. LIN (G)	
RV5505	1-224-711-00	1k, adjustable; V. SKEW (G)	
RV5506	1-226-077-00	5k, variable; V. CENT (G)	
RV5507	1-221-970-XX	500, adjustable; V. SIZE (B)	
RV5508	1-221-970-XX	500, adjustable; V. LIN (B)	
RV5509	1-224-711-00	1k, adjustable; V. SKEW (B)	
RV5510	1-226-077-00	5k, variable; V. CENT (B)	

DE BOARD

♦	A-1340-327-A	DE Board, complete	E-309

CAPACITORS

C502–505	1-123-329-00	10	25V	elect
C506	1-108-369-00	0.0022	100V	mylar
C507	1-108-379-00	0.015	100V	mylar
C551	1-123-352-00	1	50V	elect
C552	1-108-383-00	0.033	100V	mylar
C553, 554	1-123-352-00	1	50V	elect
C555	1-102-820-00	330p		
C556, 557	1-123-252-00	1	160V	elect
C558	1-108-427-00	0.033	200V	mylar
C559, 560	1-123-352-00	1	50V	elect
C561	1-121-757-00	33	160V	elect
C562	1-123-336-00	470	25V	elect

Ref. No.	Part No.	Description	Remark
		DIODE	
D551	8-719-815-55	1S1555	
		TRANSISTORS	
Q501	8-729-663-47	2SC1364	
⇒Q502	8-729-612-77	2SA1027R	
Q503	8-729-307-82	2SD478	
Q551	8-729-663-47	2SC1364	
⇒Q552, 553	8-729-612-77	2SA1027R	
⇒Q554	8-765-170-01	2SC1962	
Q555	8-729-307-82	2SD478	
Q556	8-729-326-82	2SB568	
Q557	8-729-663-47	2SC1364	
		RESISTORS	
R509	1-214-172-00	47k film	
R510	1-214-156-00	10k film	
R514	1-213-130-00	82 1W metal oxide (nonflammable)	
R551	1-244-903-00	18k ½W carbon	
R558	1-214-598-00	56k 1W metal oxide (nonflammable)	
R560	1-246-994-00	680 1/8W carbon (nonflammable)	
R561	1-206-753-00	15k 3W metal oxide (nonflammable)	
R562	1-244-918-00	75k ½W carbon	
R563	1-244-909-00	33k ½W carbon	
R564	1-244-893-00	6.8k ½W carbon	
R565	1-214-084-00	10 film	
R566	1-246-993-00	470 1/8W carbon (nonflammable)	
RV501	1-224-646-XX	22k, adjustable; H SUB BOW (G)	
RV502	1-224-646-XX	22k, adjustable; H SUB SKEW (G)	
RV551	1-224-018-00	20k, variable; V SKEW (B)	
RV552	1-224-645-XX	10k, adjustable; V BOW (B)	
RV553	1-224-018-00	20k, variable; H SKEW (B)	

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Ref. No.	Part No.	Description	Remark
T501	1-421-371-00	Transformer, ferrite	

E BOARD

	♦A-1340-271-A	E Board, complete	E-151

CAPACITORS

C5301	1-121-738-00	10	50V	elect
C5302	1-121-411-00	47	50V	elect
C5303	1-123-116-00	1	160V	elect
C5304	1-130-121-00	0.0045	1.5kV	film
C5305	1-129-748-00	0.056	400V	film
C5305	1-129-883-00	0.56	400V	film
C5306	1-108-431-00	0.068	200V	mylar
C5306	1-108-690-00	0.0068	200V	mylar
C5307	1-121-736-00	1000	10V	elect
C5308	1-121-395-00	4.7	25V	elect
C5309	1-121-391-00	1	50V	elect
C5310	1-121-246-00	4.7	160V	elect
C5311	1-108-377-00	0.01	100V	mylar
C5312,5313	1-121-414-00	100	10V	elect
C5314	1-121-757-00	33	160V	elect
C5315	1-121-738-00	10	50V	elect
C5316	1-121-411-00	47	50V	elect
C5317	1-123-116-00	1	160V	elect
C5318	1-130-121-00	0.0045	1.5kV	film
C5319	1-129-748-00	0.056	400V	film
C5319	1-129-883-00	0.56	400V	film
C5320	1-108-431-00	0.068	200V	mylar
C5320	1-108-690-00	0.0068	200V	mylar
C5321	1-121-736-00	1000	10V	elect
C5322	1-121-395-00	4.7	25V	elect
C5323	1-121-246-00	4.7	160V	elect
C5324	1-108-377-00	0.01	100V	mylar
C5325,5326	1-121-414-00	100	10V	elect
C5327	1-121-738-00	10	50V	elect
C5328	1-121-411-00	47	50V	elect
C5329	1-123-116-00	1	160V	elect
C5330	1-130-121-00	0.0045	1.5kV	film
C5331	1-129-748-00	0.056	400V	film
C5331	1-129-883-00	0.56	400V	polypropylene film
C5332	1-108-431-00	0.068	200V	mylar
C5332	1-108-690-00	0.0068	200V	mylar
C5333	1-121-736-00	1000	10V	elect
C5334	1-121-395-00	4.7	25V	elect
C5335	1-121-246-00	4.7	160V	elect
C5336	1-108-377-00	0.01	100V	mylar
C5337,5338	1-121-414-00	100	10V	elect
C5339–C5341	1-121-422-00	220	25V	elect
C5342–C5344	1-106-224-00	0.15	100V	mylar
C5345	1-121-757-00	33	160V	elect
C5346,5347	1-130-121-00	0.0045	1.5kV	film
C5348	1-123-022-00	22	350V	elect

DIODES

⇒D5301	8-719-320-11	HF1A
⇒D5302	8-719-305-15	GH3F
D5303	8-719-303-40	S34
D5304,5305	8-719-815-55	1S1555
⇒D5306,5307	8-719-815-85	1S1585
⇒D5308	8-719-320-11	HF1A
⇒D5309	8-719-305-15	GH3F
D5310	8-719-303-40	S34
D5311,5312	8-719-815-55	1S1555
⇒D5313,5314	8-719-815-85	1S1585
⇒D5315	8-719-320-11	HF1A
⇒D5316	8-719-305-15	GH3F
D5317	8-719-303-40	S34
D5318,5319	8-719-815-55	1S1555
⇒D5320,5321	8-719-815-85	1S1585
D5322	8-719-901-19	V11N
⇒D5323	8-719-305-15	GH3F
D5324	8-719-901-19	V11N

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Ref. No.	Part No.	Description	Remark
F5301	⚠1-532-215-00	Fuse, 0.8AT; 125V	
		COILS	
L5301–L5303	1-407-500-00	4.7mH	
L5304–L5306	1-459-075-00	3.3mH	
		TRANSISTORS	
Q5301	8-729-309-06	2SC1890A	
Q5302	8-729-307-82	2SD478	
⇒Q5303	8-729-663-47	2SC1364	
Q5304	8-729-309-06	2SC1890A	
⇒Q5305	8-729-612-77	2SA1027R	
⇒Q5306,5307	8-729-663-47	2SC1364	
⇒Q5308	8-729-612-77	2SA1027R	
Q5309	8-760-413-10	2SC1475	
Q5310	8-729-468-43	2SA684	
Q5311	8-729-309-06	2SC1890A	
Q5312	8-729-307-82	2SD478	
⇒Q5313	8-729-663-47	2SC1364	
⇒Q5314	8-729-309-06	2SC1890A	
⇒Q5315,5316	8-729-663-47	2SC1364	
⇒Q5317	8-729-612-77	2SA1027R	
Q5318	8-760-413-10	2SC1475	
Q5319	8-729-468-43	2SA684	
Q5320	8-729-309-06	2SC1890A	
⇒Q5321	8-729-663-47	2SC1364	
Q5322	8-729-307-82	2SD478	
Q5323	8-729-309-06	2SC1890A	
⇒Q5324,5325	8-729-663-47	2SC1364	
⇒Q5326	8-729-612-77	2SA1027R	
Q5327	8-760-413-10	2SC1475	
Q5328	8-729-468-43	2SA684	
		RESISTORS	
R5310	1-211-475-00	10k 1/8W carbon (nonflammable)	
R5314	1-247-040-00	1k 1/8W carbon (nonflammable)	
R5315	1-206-656-00	470 2W metal oxide (nonflammable)	
R5327	1-211-469-00	5.6k 1/8W carbon (nonflammable)	
R5328,5329	1-214-158-00	12k 1% film	
R5336	1-244-867-00	560 ½W carbon	
R5337	1-206-465-00	12 2W metal oxide (nonflammable)	
R5340	1-206-465-00	12 2W metal oxide (nonflammable)	
R5341	1-214-084-00	10 1% film	
R5352	1-211-475-00	10k 1/8W carbon (nonflammable)	
R5356	1-247-040-00	1k 1/8W carbon (nonflammable)	
R5357	1-206-656-00	470 2W metal oxide (nonflammable)	
R5369	1-211-469-00	5.6k 1/8W carbon (nonflammable)	
R5370,5371	1-214-158-00	12k 1% film	
R5378	1-244-867-00	560 ½W carbon	
R5379	1-206-465-00	12 2W metal oxide (nonflammable)	
R5382	1-214-084-00	10 1% film	
R5383	1-206-465-00	12 2W metal oxide (nonflammable)	
R5393	1-211-475-00	10k 1/8W carbon (nonflammable)	
R5397	1-247-040-00	1k 1/8W carbon (nonflammable)	
R5398	1-206-656-00	470 2W metal oxide (nonflammable)	
R5409	1-211-469-00	5.6k 1/8W carbon (nonflammable)	
R5410,5411	1-214-158-00	12k 1% film	
R5418	1-244-867-00	560 ½W carbon	
R5419	1-206-465-00	12 2W metal oxide (nonflammable)	
R5422	1-206-465-00	12 2W metal oxide (nonflammable)	

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
R5423	1-214-084-00	10 1% film	
R5426	1-206-463-00	10 2W metal oxide (nonflammable)	
R5427	1-206-703-00	120 3W metal oxide (nonflammable)	
R5429	1-206-531-00	68 3W metal oxide (nonflammable)	
R5430	1-206-914-00	82 3W metal oxide (nonflammable)	
R5431	1-206-531-00	68 3W metal oxide (nonflammable)	
R5432	1-212-361-00	1.2 1W metal oxide (nonflammable)	
R5433	1-211-630-00	470 ½W carbon (nonflammable)	
R5434	1-206-703-00	120 3W metal oxide (nonflammable)	
RV5301	1-222-512-00	10k, adjustable; H KEYS (G)	
RV5302	1-222-807-XX	20k, adjustable; H SIZE (G)	
RV5303	1-222-807-XX	20k, adjustable; H SKEW (G)	
RV5304	1-224-645-XX	10k, adjustable; H BOW (G)	
RV5305	1-226-077-00	5k, variable; H CENT (G)	
RV5306	1-224-646-XX	22k, adjustable; H. SIZE (R)	
RV5307	1-224-646-XX	22k, adjustable; H. SKEW (R)	
RV5308	1-224-644-XX	4.7k, adjustable; H. CENT (R)	
RV5309	1-222-512-00	10k, adjustable; H. KEYS (B)	
RV5310	1-222-807-XX	20k, adjustable; H. SIZE (B)	
RV5312	1-224-645-XX	10k, adjustable; H. BOW (B)	
RV5313	1-226-077-00	5k, variable; H. CENT (B)	
RV5314	1-223-067-00	120, adjustable; H. LIN (B)	
RV5315	1-223-021-00	1k, adjustable; H. LIN (G)	

TRANSFORMERS

T5301	1-439-137-00	HOT-1
T5302	1-439-097-00	HOT-4
T5303	1-439-230-00	LOT-1
T5304	1-439-137-00	HOT-2
T5305	1-439-097-00	HOT-5
T5306	1-439-230-00	LOT-2
T5307	1-439-137-00	HOT-3
T5308	1-439-097-00	HOT-6
T5309	1-439-230-00	LOT-3
T5310	1-439-229-00	LOT-4
	1-533-087-00	Holder, fuse

EB BOARD

	♦1-601-333-00	EB Board	E-206

CAPACITORS

C501	1-123-333-00	100	25V	elect
C502–505	1-123-329-00	10	25V	elect
C506	1-108-369-00	0.0022	100V	mylar
C507	1-108-379-00	0.0015	100V	mylar

TRANSISTORS

Q501	8-729-663-47	2SC1364
⇒Q502	8-729-612-77	2SA1027R
Q503	8-729-307-82	2SD478

RESISTORS

R509	1-214-172-00	47k	¼W	metal
R510	1-214-156-00	10k	¼W	metal
R514	1-213-130-00	82	1W	metal oxide (nonflammable)
RV501	1-224-646-XX	22k, adjustable; H. SUB BOW		
RV502	1-224-646-XX	22k, adjustable; H. SUB SKEW		

TRANSFORMER

T501	1-421-371-00	Ferrite

F BOARD

	♦A-1240-217-A	F Board, complete	E-351

- Items marked "♦" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

Ref. No.	Part No.	Description			Remark
		CAPACITORS			
C6101–C6103	⚠1-130-087-00	0.1	300V	film	
C6104–C6107	1-102-189-00	0.0047	125V		
C6108,6109	1-123-031-00	2200	35V	elect	
C6110	1-121-423-00	220	50V	elect	
C6112	1-121-450-00	2.2	50V	elect	
C6115–C6117	⚠1-102-222-00	1000p	250V		
C6118	1-125-183-00	3300	35V	elect	
C6119	⚠1-102-222-00	1000p	250V		
C6120	1-108-745-00	0.22	300V	film	
		DIODES			
D6101	8-719-851-51	S5151			
D6102	8-719-801-51	S5151R			
D6103–D6106	8-719-911-55	U05G			
D6107	8-719-200-02	10E2			
D6109	8-719-200-02	10E2			
F6101	⚠1-532-325-00	Fuse, 6.3AT			
F6102	⚠1-532-078-00	Fuse, 1AT			
F6103	⚠1-532-286-00	Fuse, 2.5AT			
F6104	⚠1-532-285-00	Fuse, 1.25AT			
		RESISTORS			
R6101	⚠1-202-723-00	2.2M	½W	composition	
R6102	1-206-765-11	47k	3W	metal oxide (nonflammable)	
R6103	1-244-895-00	8.2k	½W	carbon	
R6104	1-206-495-11	2.2	3W	metal oxide (nonflammable)	
RL6101	⚠1-515-265-00	Relay			
		TRANSFORMERS			
T6101	⚠1-421-372-11	LFT-1			
T6102	⚠1-421-372-11	LFT-2			
T6103	⚠1-421-372-11	LFT-3			
T6104	⚠1-421-372-11	LFT-4			
	1-533-087-00	Holder, fuse			

GA BOARD

Ref. No.	Part No.	Description			Remark
	♦A-1316-005-A	GA Board, complete			E-203
		CAPACITORS			
C601	1-123-005-00	22	250V	elect	
C602	1-108-704-00	0.1	200V	mylar	
C603	1-121-246-00	4.7	160V	elect	
C604	1-121-757-00	33	160V	elect	
C605	1-102-050-00	0.01	500V		
C606	1-121-411-00	47	50V	elect	
C607	1-108-849-00	0.1		mylar	
C608	1-121-738-00	10	50V	elect	
C609	1-121-417-00	100	50V	elect	
		DIODES			
⇒D601	8-719-200-02	10E2			
⇒D602	8-719-931-08	EQB01-08			
⇒D603	8-719-931-06	EQB01-06			
⇒D604	8-719-900-93	V09C			
F601	⚠1-532-279-00	Fuse, 0.5AT			
		COIL			
L601	1-407-346-00	200μH			
		TRANSISTORS			
⇒Q601	8-765-132-00	2SC867A			
⇒Q602	8-765-170-01	2SC1962			
Q603	8-760-413-10	2SC1475			
⇒Q604	8-729-663-47	2SC1364			

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

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Ref. No.	Part No.	Description			Remark
		RESISTORS			
R602	1-213-150-00	3.9k	1W	metal oxide (nonflammable)	
R603	1-244-895-00	8.2k	½W	carbon	
R604	1-213-125-00	33	1W	metal oxide (nonflammable)	
R605	1-211-451-00	1k	1/8W	carbon (nonflammable)	
R606	1-244-893-00	6.8k	½W	carbon	
R609	1-206-757-00	22k	3W	metal oxide (nonflammable)	
R610	1-211-427-00	100	1/8W	carbon (nonflammable)	
R611, 612	1-244-921-00	100k	½W	carbon	
R613	1-244-921-00	100k	½W	carbon	
■R614, 615 ⚠	————	——	¼W	carbon	
R616, 617	1-206-498-00	33	3W	metal oxide (nonflammable)	
R618	1-211-451-00	1k	1/8W	carbon (nonflammable)	
R622	1-244-877-00	1.5k	½W	carbon	
R623	1-211-427-00	100	1/8W	carbon (nonflammable)	
RV601	1-224-641-XX	470, adjustable; 18V ADJ			
	1-533-087-00	Holder, fuse			

GB BOARD

•	A-1311-037-A	GB Board, complete	E-153

CAPACITORS

C5101	1-121-391-00	1	50V	elect	
C5102,5103	1-108-379-00	0.015	100V	mylar	
C5104	1-121-415-00	100	16V	elect	
C5105	1-108-385-00	0.047	100V	mylar	
C5106	1-121-391-00	1	50V	elect	
C5107	1-102-030-00	330p	500V		
C5108	1-121-395-00	4.7	25V	elect	
C5109	1-108-638-00	0.1	100V	mylar	
C5110	1-102-973-00	100p			
C5111,5112	1-108-911-00	0.0022	100V	mylar	
C5113	1-102-973-00	100p			
C5114	1-121-396-00	4.7	50V	elect	
C5115	1-121-404-00	33	25V	elect	
C5116	1-108-704-00	0.1	200V	mylar	
C5117	1-121-757-00	33	160V	elect	
C5118	1-108-385-00	0.047	100V	mylar	
C5119	1-102-963-00	33p			
C5120	1-102-244-00	220p	500V		
C5121	1-108-385-00	0.047	100V		
C5122	1-102-963-00	33p			
C5123	1-102-030-00	330p	500V		
C6201,6202	1-121-757-00	33	160V	elect	
C6203	1-108-427-00	0.033	200V	mylar	
C6204	1-108-546-00	1.5	400V	mylar	
C6205	1-108-907-00	2.2	200V	mylar	
C6206	1-108-646-00	0.47	100V	mylar	
C6207	1-108-833-00	0.0047		mylar	
C6208	1-121-404-00	33	25V	elect	
C6209	1-108-845-00	0.047		mylar	
C6210	1-121-404-00	33	25V	elect	
C6211	1-121-450-00	2.2	50V	elect	
C6212	1-121-416-00	100	25V	elect	
C6213	1-121-421-00	220	16V	elect	
C6214	1-121-450-00	2.2	50V	elect	
C6215	1-121-391-00	1	50V	elect	
C6216,6217	1-121-738-00	10	50V	elect	

DIODES

D5101–D5104	8-719-815-55	1S1555
⇒D6201	8-719-931-10	EQB01-10
⇒D6202–⇒D6204	8-719-900-93	V09C
⇒D6205	8-719-930-11	EQB01-11Z
D6206	8-719-815-55	1S1555

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Ref. No.	Part No.	Description	Remark
⇒D6207	8-719-931-10	EQB01-10	
⇒D6208,6209	8-719-900-93	V09C	
D6210–D6213	8-719-815-55	1S1555	
D6214	8-719-901-24	Thyristor, CV12E	
D6215	8-719-815-55	1S1555	
D6216	8-719-200-02	10E2	
F6201	⚠1-532-259-00	Fuse, 1.6AT	

COILS

L6201,6202	1-407-720-00	100μH	

TRANSITORS

⇒Q5101–⇒Q5103	8-729-663-47	2SC1364	
Q5104,5105	8-729-372-31	2SC1723	
Q6201	8-729-307-82	2SD478	
Q6202	8-729-309-06	2SC1890A	
Q6203	8-729-307-82	2SD478	
⇒Q6204–⇒Q6206	8-729-663-47	2SC1364	
⇒Q6207	8-729-612-77	2SA1027R	
⇒Q6208	8-729-663-47	2SC1364	
Q6209	8-729-309-06	2SC1890A	
⇒Q6210	8-729-612-77	2SA1027R	
⇒Q6211,6212	8-729-663-47	2SC1364	
Q6213	8-760-413-10	2SC1475	

RESISTORS

R5108	1-206-707-00	180	3W	metal oxide (nonflammable)
R5111	1-213-150-00	3.9k	1W	metal oxide (nonflammable)
R5120	1-206-717-00	470	3W	metal oxide (nonflammable)
R5123	1-206-678-00	3.9k	2W	metal oxide (nonflammable)
R5124	1-217-005-00	0.68	3W	wirewound (nonflammable)
R5127	1-206-670-00	1.8k	2W	metal oxide (nonflammable)
R5128	1-217-003-00	0.47	3W	wirewound (nonflammable)
R5129	1-206-749-00	10k	3W	metal oxide (nonflammable)
R5130	1-206-648-00	10k	2W	metal oxide (nonflammable)
R6201	1-206-745-00	6.8k	3W	metal oxide (nonflammable)
R6203	1-211-651-00	3.6k	½W	carbon (nonflammable)
R6204	1-244-933-00	330k	½W	carbon (nonflammable)
R6205	1-247-040-00	1k	1/8W	carbon (nonflammable)
R6206	1-214-180-00	100k	1%	metal oxide
■R6207,6208	⚠ ————	——	¼W	carbon
R6209	1-247-040-00	1k	1/8W	carbon (nonflammable)
R6210	1-214-179-00	91k	1%	metal oxide
■R6211,6212	⚠ ————	——	¼W	carbon
R6216	1-244-893-00	6.8k	½W	carbon
R6220	1-213-163-00	47k	1W	metal oxide (nonflammable)
R6222	1-213-161-00	33k	1W	metal oxide (nonflammable)
R6232	1-211-930-00	33	1/8W	carbon (nonflammable)
R6235	1-206-725-00	1k	3W	metal oxide (nonflammable)
R6237	1-214-163-00	20k	1%	metal oxide
R6241	1-247-033-00	100	1/8W	carbon (nonflammable)
RV5101	1-224-646-XX	22k, adjustable; H HOLD		

TRANSFORMERS

T5101	1-437-076-00	HDT-1
T5102	1-437-076-00	HDT

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Ref. No.	Part No.	Description			Remark
		GC BOARD			
	♦A-1311-043-A	GC Board, complete			E-152
		CAPACITORS			
C801	1-108-546-00	1.5	400V	mylar	
C802–805	⚠1-129-924-00	0.016	1.5kV	film	
C806, 807	1-108-546-00	1.5	400V	mylar	
C808	1-108-704-00	0.1	200V	mylar	
		DIODES			
D801, 802	8-719-302-22	SB-2B			
L801	1-421-350-00	Coil, ferrite chork; H.C.A			
NL801	1-519-013-13	Discharge Tube			
		RESISTORS			
R801, 802	1-206-487-00	1	3W	metal oxide (nonflammable)	
R812, 813	1-217-001-00	0.33	3W	wirewound (nonflammable)	
		HB BOARD			
	♦1-587-481-00	HB Board			E-360
		CAPACITOR			
C5451	1-129-942-00	0.0027	1.5kV		
		RESISTORS			
R5451–R5453	1-202-723-00	2.2M	½W	composition	
R5454	1-202-621-00	100k	½W	composition	
RV5451	1-226-114-00	2.2M, adjustable; SCRN-B			
RV5452	1-226-114-00	2.2M, adjustable; SCRN-G			
RV5453	1-226-114-00	2.2M, adjustable; SCRN-R			

Ref. No.	Part No.	Description			Remark
		HA BOARD			
	♦1-600-127-00	HA Board			E-106
S9101A–C	1-552-017-21	Switch, 3-key; PAL, SECAM, NTSC4.43			
		HC BOARD			
	♦1-600-140-00	HC Board			E-107
		COIL			
L9201	1-407-161-XX	22μH			
		RESISTORS			
RV9201	1-224-015-00	1k, variable; PICTURE			
RV9202	1-224-017-00	5k, variable; BRIGHT			
RV9203	1-224-017-00	5k, variable; COLOR			
RV9204	1-224-016-00	3k-U, variable; HUE			
		HD BOARD			
	♦1-600-141-00	HD Board			E-108
		CAPACITORS			
C9301	1-121-398-00	10	25V	elect	
C9302	1-121-391-00	1	50V	elect	
C9303	1-121-404-00	33	25V	elect	
C9304	1-108-366-00	0.0012	100V	mylar	
C9306	1-108-381-00	0.022	100V	mylar	
C9307	1-121-416-00	100	25V	elect	
		RESISTORS			
RV9301	1-224-144-00	50-D, variable; VOLUME			
RV9302	1-224-144-00	50-D, variable; TONE			

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Ref. No.	Part No.	Description			Remark
		HE BOARD			
	♦1-600-142-00	HE Board			E-109
		DIODE			
D9401	8-719-301-03	SEL103R			
		Z BOARD			
	♦1-600-143-00	Z Board			E-110
		CAPACITORS			
C51, 52	1-121-392-00	3.3	25V	elect	
C53	1-121-352-00	47	10V	elect	
		TRANSISTOR			
Q51	8-729-665-47	2SC1362			
		Q BOARD			
	♦A-1270-064-A	Q Board, complete			E-111
		CAPACITORS			
C401	1-121-651-00	10	16V	elect	
C404	1-102-947-00	10p			
C405	1-102-978-00	220p			
C406	1-121-651-00	10	16V	elect	
C407	1-121-395-00	4.7	25V	elect	
C408	1-121-651-00	10	16V	elect	
C409	1-102-947-00	10p			
C410	1-102-978-00	220p			
C411	1-121-651-00	10	16V	elect	
C412	1-121-395-00	4.7	25V	elect	
C413	1-121-657-00	1000	25V	elect	
C414	1-121-422-00	220	25V	elect	
C415	1-121-651-00	10	16V	elect	
C417	1-121-480-00	22	25V	elect	
C418	1-121-651-00	10	16V	elect	
C420	1-121-480-00	22	25V	elect	
C421	1-102-836-00	470p			
C422	1-121-398-00	10	25V	elect	
C423	1-121-391-00	1	50V	elect	
C424	1-121-651-00	10	16V	elect	
C425	1-121-391-00	1	50V	elect	
C426	1-102-121-00	0.0022			
C427	1-121-651-00	10	16V	elect	
C428	1-102-121-00	0.0022			
C430	1-121-421-00	220	16V	elect	
C431	1-108-638-00	0.1	100V	mylar	
C432	1-121-361-00	470	35V	elect	
C433	1-121-403-00	33	16V	elect	
C434	1-108-365-00	0.001	100V	mylar	
C435	1-102-976-00	180p			
C436	1-121-421-00	220	16V	elect	
C437	1-102-953-00	18p			
C438	1-121-415-00	100	16V	elect	
C439	1-121-733-00	470	25V	elect	
		DIODES			
D401	8-719-815-55	1S1555			
⇒D402	8-719-815-85	1S1585			
D403, 404	8-719-122-00	VD1220			
F401	⚠1-532-284-00	Fuse, 630mAT 250V			
		IC			
IC401	8-759-600-95	CX095C			
		TRANSISTORS			
⇒Q401–404	8-729-663-47	2SC1364			
Q405	8-729-300-62	2SD666A			
⇒Q406–410	8-729-663-47	2SC1364			
⇒Q411	8-729-612-77	2SC1027R			
Q412	8-725-412-00	2SC1124			

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Ref. No.	Part No.	Description	Remark
Q413	8-729-316-12	2SC1061	
Q414	8-729-317-12	2SA671	
		RESISTORS	
R423	1-213-138-00	390 1W metal oxide (nonflammable)	
R451	1-244-859-00	270 ½W carbon	
R462	1-213-133-00	150 1W metal oxide (nonflammable)	
R463	1-213-131-00	100 1W metal oxide (nonflammable)	
R465	1-212-367-00	3.9 1W metal oxide (nonflammable)	
R467, 468	1-212-356-00	0.47 1W metal oxide (nonflammable)	
R471	1-206-447-00	2.2 2W metal oxide (nonflammable)	
	1-533-087-00	Holder, fuse	

MISCELLANEOUS

C6113,6114	1-125-099-00	560+10x2 200V elect	E-354
CNJ901	1-509-095-00	8P Multi Socket, VTR	E-102
DC851	⚠1-453-080-YY	High-voltage block	E-361
F6202	⚠1-532-233-31	Fuse, 63mAT	
J901, 903	1-509-851-00	BNC Connector, VIDEO IN	E-103
J902, 904	1-507-412-XX	Mini Jack, AUDIO IN	E-101
L5502–L5504	⚠1-451-166-00	Deflection Yoke, DY	E-301
L5507,5508	⚠1-452-203-21	Neck Ass'y, picture tube	E-303
L5509	⚠1-452-203-11	Neck Ass'y, picture tube	E-304
M601	⚠1-541-141-00	Ventilator, 1B-625F	E-308
Q605, 606	8-729-311-42	2SC1114	E362,363
Q607	8-765-132-00	2SC867A	E-207
Q801	8-729-372-51	2SD725	E-154
Q5329	8-729-372-51	2SD725	E-155
Q6214	8-729-301-62	2SC1116A	E-364
R626, 627	1-205-526-00	220 40W cement (nonflammable)	E-358

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Ref. No.	Part No.	Description	Remark
S601	1-532-548-00	Sensor, fan stop	E-302
S901	1-516-502-11	Switch, pusubutton; LINE-1,2	E-104
S902	1-516-286-00	Switch, pushbutton; HATCH	E-305
S6101	⚠1-552-141-00	Switch, pushbutton; POWER ALL OFF	E-105
S6102	1-516-463-XX	Switch, miniature; POWER	
S6103	⚠1-526-572-00	Socket, voltage select	E-352
SP901	1-502-753-00	Speaker, 8Ω	E-51
T801, 802	⚠1-439-228-00	Transformer Ass'y, flyback; FBT-1, 2	E-355
T6105	⚠1-446-316-00	Transformer, power; PT	E-352
V901G	⚠8-738-601-05	Picture Tube, SD-102G	E-312
V901B	⚠8-738-602-05	Picture Tube, SD-102B	E-310
V901R	⚠8-738-603-05	Picture Tube, SD-102R	E-311
CNJ902	⚠1-509-547-00	Connector, 3P; AC IN	E-356
	1-507-176-XX	1P Pin Jack	
	1-533-072-13	Holder, fuse	
	⚠1-534-849-00	Lead Ass'y, high-voltage	E-306
	1-536-378-XX	L-Type Terminal Strip	E-359

ACCESSORIES AND PACKING MATERIALS

Part No.	*Description*	*Remark*
X-4332-236-0	Base Ass'y, carton; projector	
X-4500-007-1	Polishing Cloth	
1-551-258-11	⚠ Cord, power	E-353
3-701-360-02	Label, tack	
3-701-630-00	Bag, polyethylene	
4-332-293-00	Bag, protection; screen (KP-5010PS)	
4-332-294-00	Cushion (A), screen (KP-5010PS)	
4-332-295-00	Cushion (B), screen (KP-5010PS)	
4-333-216-00	Sheet, protection; screen	
4-333-266-00	Reinforcement, projector	
4-333-267-00	Bag, protection; projector	
4-333-273-00	Cushion, left upper; projector	
4-333-274-00	Cushion, right upper; projector	
4-333-275-00	Cushion, lower; projector	
4-333-278-00	Bag, protection; screen (KP-7210PS)	
4-333-279-00	Reinforcement, screen (KP-7210PS)	
4-333-280-00	Box, screen pole (KP-7210PS)	
4-333-281-00	Sleeve, screen pole (KP-7210PS)	
4-333-282-00	Holder (A), screen (KP-7210PS)	
4-333-283-00	Holder (B), screen (KP-7210PS)	
4-333-284-00	Holder (C), screen (KP-7210PS)	
4-333-285-00	Cushion (A), screen (KP-7210PS)	
4-333-286-00	Cushion (B), screen (KP-7210PS)	
4-333-906-00	Label, screen (KP-7210PS)	
4-333-907-00	Label, screen (KP-5010PS)	
4-333-914-00	Carton, screen (KP-5010PS)	
4-333-915-00	Carton, projector (KP-5010PS)	
4-333-916-00	Carton, screen (KP-7210PS)	
4-333-917-00	Carton, projector (KP-7210PS)	
4-333-918-00	Sheet, protection; pole (KP-5010PS)	
4-333-921-00	Reinforcement, screen (KP-5010PS)	
4-333-925-00	Reinforcement (A), screen (KP-5010PS)	
4-333-927-00	Label, caution	
4-333-928-00	Cover, screen (KP-7210PS)	
4-333-929-00	Cover, screen (KP-5010PS)	
4-495-818-11	Manual, instruction	

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

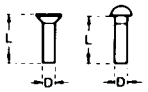
1/4 WATT CARBON RESISTORS

Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.
1.0	1-246-401-00	10	1-246-425-00	100	1-246-449-00	1.0k	1-246-473-00	10k	1-246-497-00	100k	1-246-521-00	1.0M	1-246-545-00
1.1	1-246-402-00	11	1-246-426-00	110	1-246-450-00	1.1k	1-246-474-00	11k	1-246-498-00	110k	1-246-522-00	1.1M	1-210-814-00
1.2	1-246-403-00	12	1-246-427-00	120	1-246-451-00	1.2k	1-246-475-00	12k	1-246-499-00	120k	1-246-523-00	1.2M	1-210-815-00
1.3	1-246-404-00	13	1-246-428-00	130	1-246-452-00	1.3k	1-246-576-00	13k	1-246-500-00	130k	1-246-524-00	1.3M	1-210-816-00
1.5	1-246-405-00	15	1-246-429-00	150	1-246-453-00	1.5k	1-246-577-00	15k	1-246-501-00	150k	1-246-525-00	1.5M	1-210-817-00
1.6	1-246-406-00	16	1-246-430-00	160	1-246-454-00	1.6k	1-246-578-00	16k	1-246-502-00	160k	1-246-526-00	1.6M	1-210-818-00
1.8	1-246-407-00	18	1-246-431-00	180	1-246-455-00	1.8k	1-246-579-00	18k	1-246-503-00	180k	1-246-527-00	1.8M	1-210-819-00
2.0	1-246-408-00	20	1-246-432-00	200	1-246-456-00	2.0k	1-246-580-00	20k	1-246-504-00	200k	1-246-528-00	2.0M	1-210-820-00
2.2	1-246-409-00	22	1-246-433-00	220	1-246-457-00	2.2k	1-246-581-00	22k	1-246-505-00	220k	1-246-529-00	2.2M	1-210-821-00
2.4	1-246-410-00	24	1-246-434-00	240	1-246-458-00	2.4k	1-246-582-00	24k	1-246-506-00	240k	1-246-530-00	2.4M	1-244-754-00
2.7	1-246-411-00	27	1-246-435-00	270	1-246-459-00	2.7k	1-246-583-00	27k	1-246-507-00	270k	1-246-531-00	2.7M	1-244-755-00
3.0	1-246-412-00	30	1-246-436-00	300	1-246-460-00	3.0k	1-246-584-00	30k	1-246-508-00	300k	1-246-532-00	3.0M	1-244-756-00
3.3	1-246-413-00	33	1-246-437-00	330	1-246-461-00	3.3k	1-246-585-00	33k	1-246-509-00	330k	1-246-533-00	3.3M	1-244-757-00
3.6	1-246-414-00	36	1-246-438-00	360	1-246-462-00	3.6k	1-246-586-00	36k	1-246-510-00	360k	1-246-534-00	3.6M	1-244-758-00
3.9	1-246-415-00	39	1-246-439-00	390	1-246-463-00	3.9k	1-246-587-00	39k	1-246-511-00	390k	1-246-535-00	3.9M	1-244-759-00
4.3	1-246-416-00	43	1-246-440-00	430	1-246-464-00	4.3k	1-246-488-00	43k	1-246-512-00	430k	1-246-536-00	4.3M	1-244-760-00
4.7	1-246-417-00	47	1-246-441-00	470	1-246-465-00	4.7k	1-246-489-00	47k	1-246-513-00	470k	1-246-537-00	4.7M	1-244-761-00
5.1	1-246-418-00	51	1-246-442-00	510	1-246-466-00	5.1k	1-246-490-00	51k	1-246-514-00	510k	1-246-538-00	5.1M	1-244-762-00
5.6	1-246-419-00	56	1-246-443-00	560	1-246-467-00	5.6k	1-246-491-00	56k	1-246-515-00	560k	1-246-539-00		
6.2	1-246-420-00	62	1-246-444-00	620	1-246-468-00	6.2k	1-246-492-00	62k	1-246-516-00	620k	1-246-540-00		
6.8	1-246-421-00	68	1-246-445-00	680	1-246-469-00	6.8k	1-246-493-00	68k	1-246-517-00	680k	1-246-541-00		
7.5	1-246-422-00	75	1-246-446-00	750	1-246-470-00	7.5k	1-246-494-00	75k	1-246-518-00	750k	1-246-542-00		
8.2	1-246-423-00	82	1-246-447-00	820	1-246-471-00	8.2k	1-246-495-00	82k	1-246-519-00	820k	1-246-543-00		
9.1	1-246-424-00	91	1-246-448-00	910	1-246-472-00	9.1k	1-246-496-00	91k	1-246-520-00	910k	1-246-544-00		

HARDWARE NOMENCLATURE

Screw:

– P 3 x 10
- *L: Length in mm*
- *D: Diameter in mm*
- *Type of head*
- *Indicated slotted-head only. Unless otherwise indicated, it means cross-recessed head (Phillips type).*



Nut, Washer, Retaining ring:

N 3
- *Diameter of usable screw or shaft*
- *Reference designation*

Reference Designation	Shape	Description	Remarks
SCREWS			
P		pan-head screw	binding-head (B) screw for replacement
PWH		pan-head screw with washer face	binding-head (B) screw and flat washer for replacement
PS PSP		pan-head screw with spring washer	binding-head (B) screw and spring washer for replacement
PSW PSPW		pan-head screw with spring and flat washers	binding-head (B) screw and spring and flat washers for replacement
R		round-head screw	binding-head (B) screw for replacement
K		flat-countersunk-head screw	
RK		oval-countersunk-head screw	
B		binding-head screw	
T		truss-head screw	binding-head (B) screw for replacement
F		flat-fillister-head screw	
RF		fillister-head screw	
BV		braizer-head screw	

Reference Designation	Shape	Description	Remarks
SELF-TAPPING SCREWS			
TA		self-tapping screw	ex: TA, P 3x 10
PTP		pan-head self-tapping screw	binding-head self-tapping (TA, B) screw for replacement
PTPWH		pan-head self-tapping screw with washer face	binding-head self tapping (TA, B) screw and flat washer for replacement
PTTWH		pan-head thread-rolling screw with washer face	binding-head (B) screw and flat washer for replacement
SET SCREWS			
SC		set screw	
SC		hexagon-socket set screw	ex: SC 2.6 x4, hexagon socket
NUT			
N		nut	
WASHERS			
W		flat washer	
SW		spring washer	
LW		internal-tooth lock washer	ex: LW3, internal
LW		external-tooth lock washer	ex: LW3, external
RETAINING RINGS			
E		retaining ring	
G		grip-type retaining ring	

Sony Corporation

SONY
COLOR VIDEO PROJECTION SYSTEM

KP-5010PS
KP-7210PS

Chassis No.
KP-5010PS : SCC-208A-B
KP-7210PS : SCC-209A-B

AEP Model

CAUTION

- Avoid rubbing the inked surface.
- Do not allow the paper to contact hot power resistor, soldering irons, etc.

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

SAFETY-RELATED COMPONENT WARNING !!

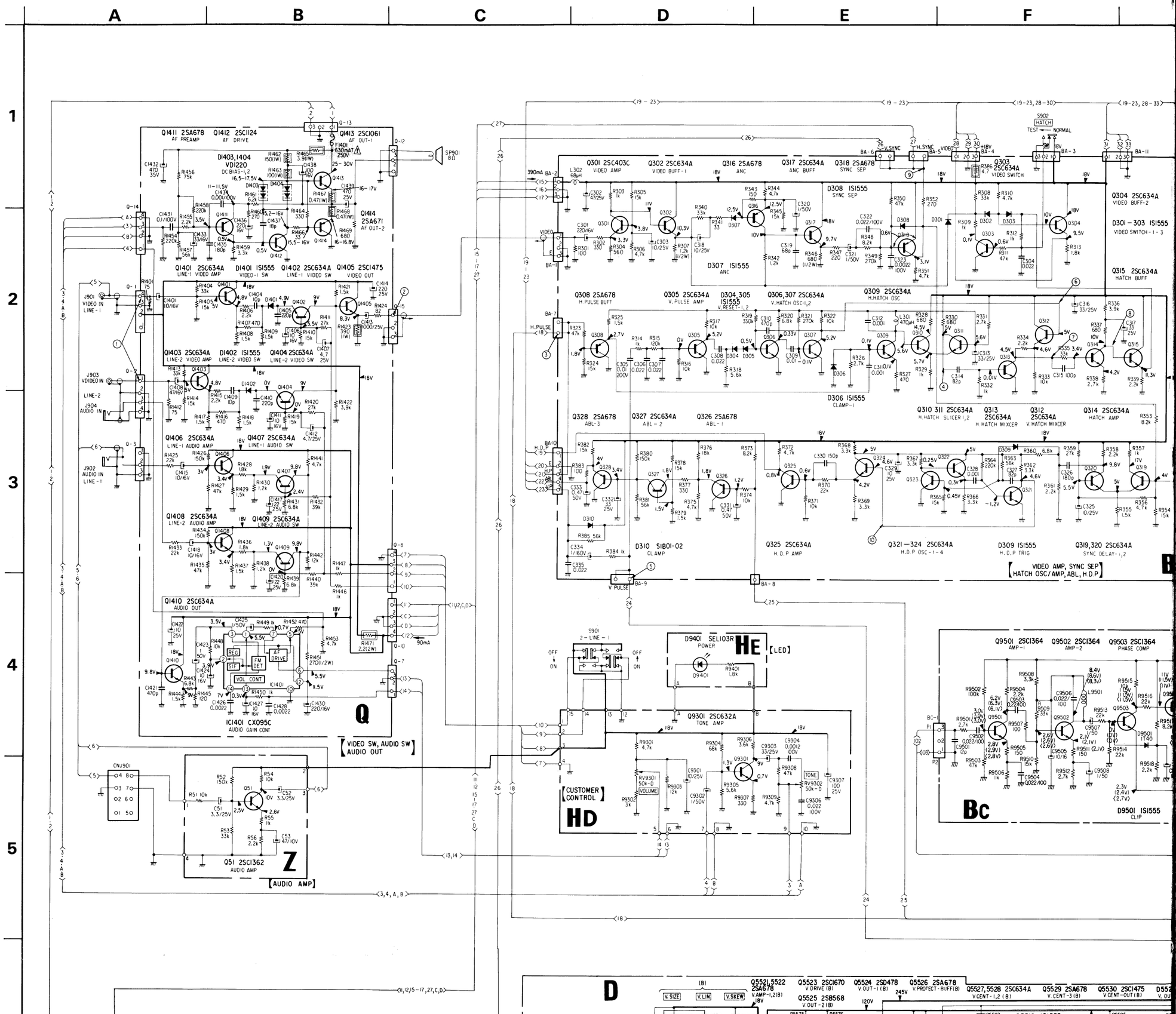
COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

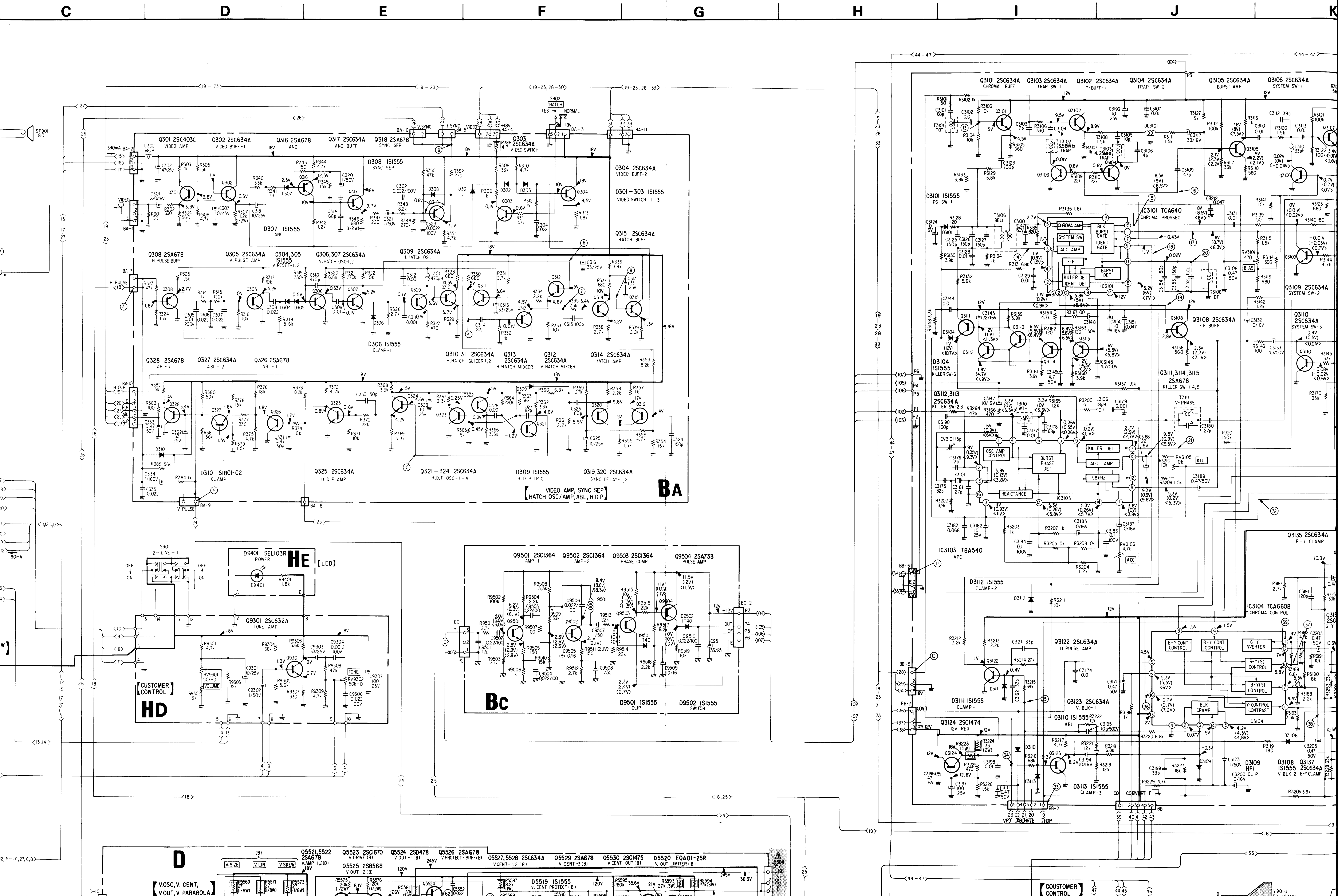
SICHERHEITSHINWEIS FÜR KOMPONENTEN !!

DIE IN DEN SCHALTBILDERN, DEN IN EINZELTEILE AUFGELÖSTEN PERSPEKTIVISCHEN ZEICHNUNGEN UND DEN TEILELISTEN SCHRAFFIERT EINGEZEICHNETE UND DURCH DAS ZEICHEN ⚠ GEKENNZEICHNETE KOMPONENTEN SIND FÜR DIE BETRIEBSSICHERHEIT KRITISCH. DIESE KOMPONENTEN SIND DURCH SOLCHE SONY TEILE ZU ERSETZEN, DEREN TEILENUMMERN IN DIESEM HANDBUCH ODER IN VON SONY HERAUSGEGEBENEN ERGÄNZUNGEN ANGEGEBEN SIND.
AUF FÜR DIE BETRIEBSSICHERHEIT KRITISCHE SCHALTUNGSEINSTELLUNGEN WIRD IN DIESEM HANDBUCH HINGEWIESEN.
BEFOLGEN SIE DIESE ANWEISUNGEN STETS, WENN KRITISCHE KOMPONENTEN AUSGEWECHSELT WERDEN ODER VERDACHT AUF FUNKTIONSSTÖRUNGEN BESTEHT.

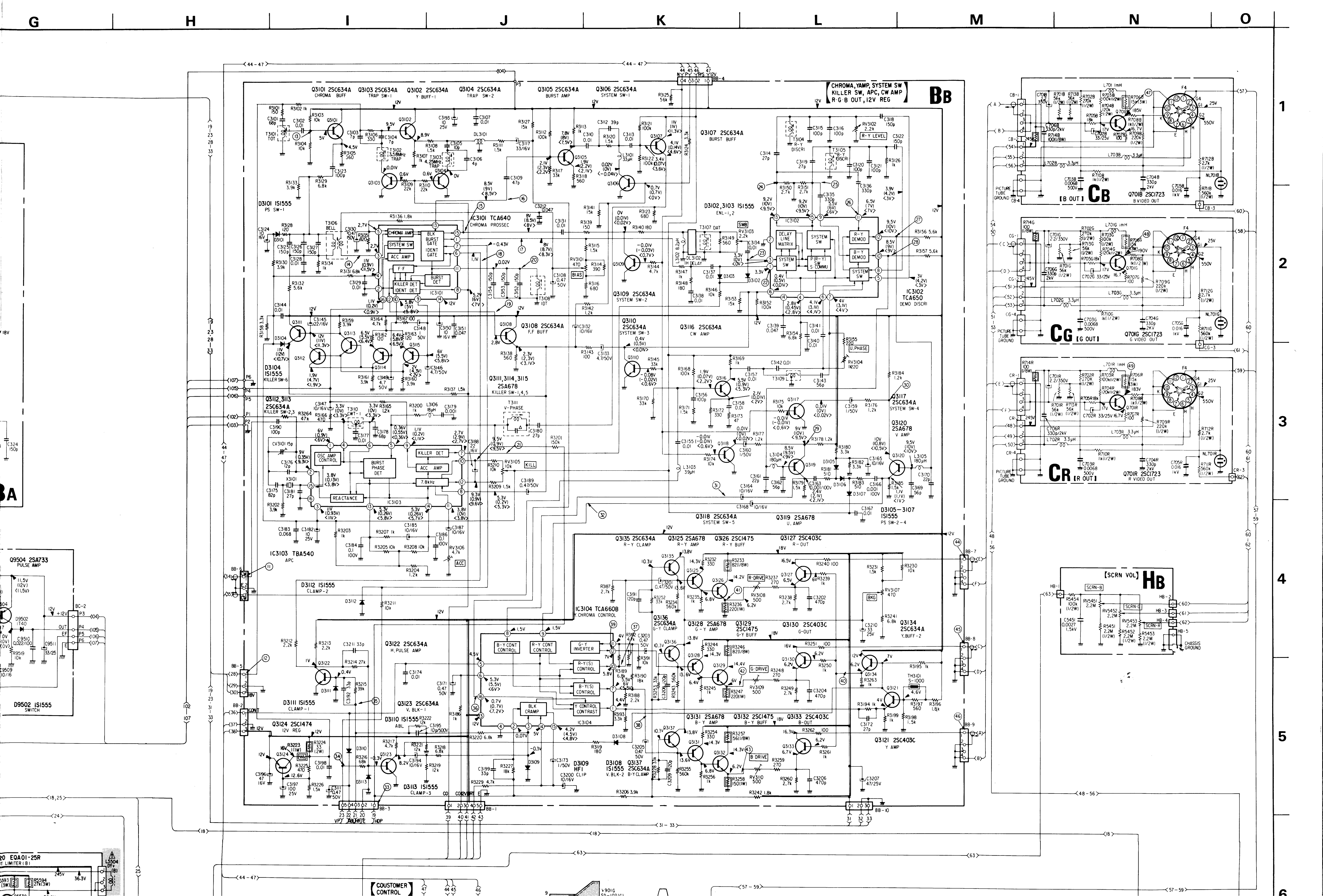
DIE BESCHLEUNIGUNGSSPANNUNG DARF NICHT ERHÖHT WERDEN, DAMIT KEINE SCHÄDLICHEN

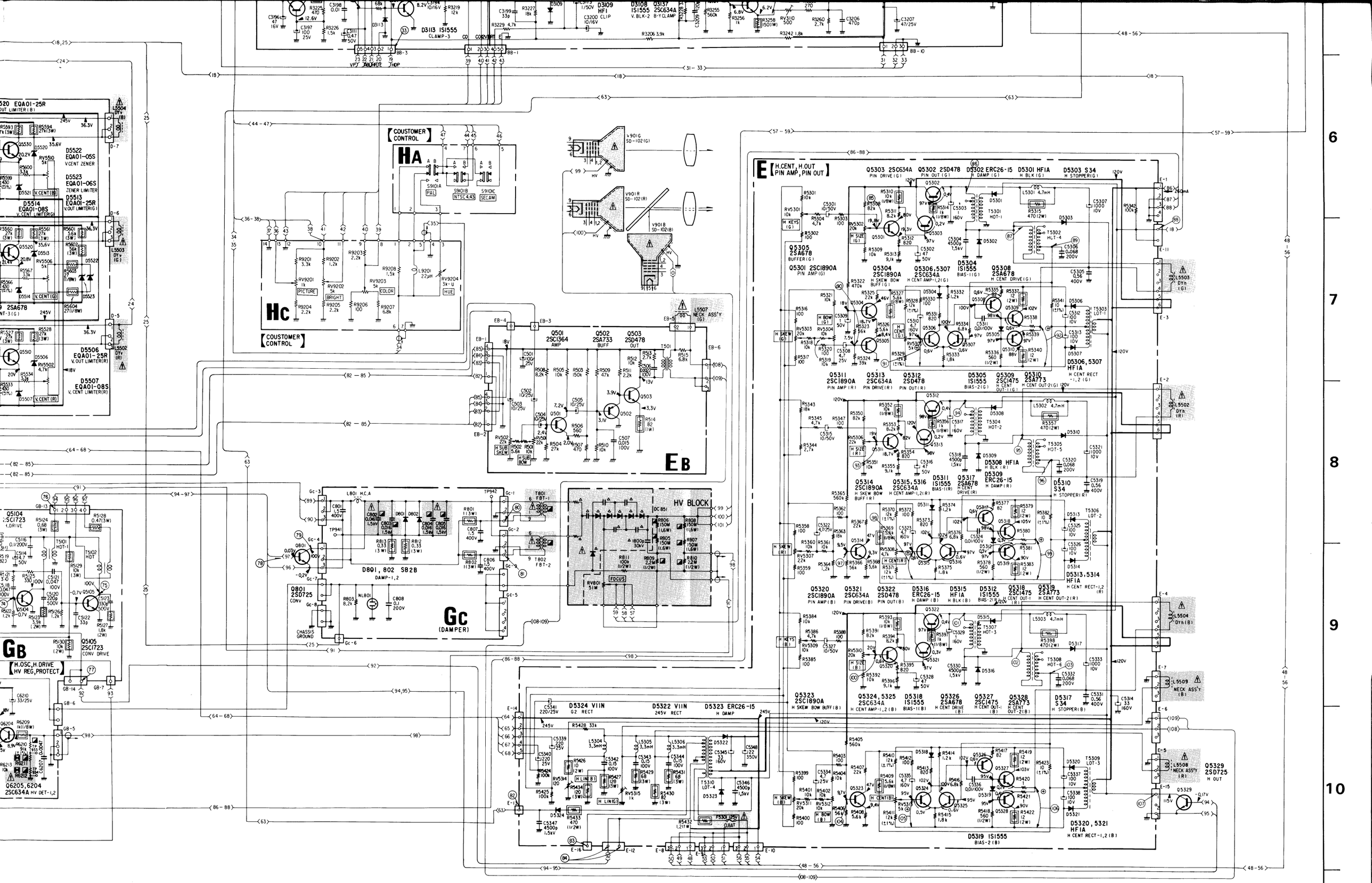
SCHEMATIC DIAGRAM





C
D
E
F
G
H
I
J
K
SP901 8Ω
Q301 2SC403C VIDEO AMP
Q302 2SC634A VIDEO BUFF-1
Q316 2SA678 ANC
Q317 2SC634A ANC BUFF
Q318 2SA678 SYNC SEP
Q303 2SC634A VIDEO SWITCH
D308 1S1555 SYNC SEP
D307 1S1555 ANC
S902 HATCH TEST NORMAL
Q304 2SC634A VIDEO BUFF-2
D301-303 1S1555 VIDEO SWITCH-1-3
Q315 2SC634A HATCH BUFF
Q308 2SA678 H.PULSE BUFF
Q305 2SC634A V.PULSE AMP
D304,305 1S1555 V.RESET-1,2
Q306,307 2SC634A V.HATCH OSC-1,2
Q309 2SC634A H.HATCH OSC
D306 1S1555 CLAMP-1
Q310 311 2SC634A H.HATCH SLICER 1,2
Q313 2SC634A H.HATCH MIXER
Q312 2SC634A V.HATCH MIXER
Q314 2SC634A HATCH AMP
Q328 2SA678 ABL-3
Q327 2SC634A ABL-2
Q326 2SA678 ABL-1
D310 S1B01-02 CLAMP
Q325 2SC634A H.D.P AMP
Q321-324 2SC634A H.D.P OSC-1-4
D309 1S1555 H.D.P TRIG
Q319,320 2SC634A SYNC DELAY-1,2
VIDEO AMP, SYNC SEP HATCH OSC/AMP, ABL, H.D.P
BA
V PULSE
D9401 SEL103R POWER
HE [LED]
S901 2-LINE-1
Q9301 2SC632A TONE AMP
RV9301 50k-D VOLUME
RV9302 50k-D TONE
CUSTOMER CONTROL
HD
Q9501 2SC1364 AMP-1
Q9502 2SC1364 AMP-2
Q9503 2SC1364 PHASE COMP
Q9504 2SA733 PULSE AMP
D9501 1S1555 CLIP
D9502 1S1555 SWITCH
Bc
Q3101 2SC634A CHROMA BUFF
Q3103 2SC634A TRAP SW-1
Q3102 2SC634A Y BUFF-1
Q3104 2SC634A TRAP SW-2
Q3105 2SC634A BURST AMP
Q3106 2SC634A SYSTEM SW-1
D3101 1S1555 PS SW-1
IC3101 TCA640 CHROMA PROSSEC
CHROMA AMP
SYSTEM SW
ACC AMP
BLK BURST GATE IDENT GATE
KILLER DET IDENT DET
BURST DET
Q3109 2SC634A SYSTEM SW-2
Q3108 2SC634A F.F BUFF
Q3110 2SC634A SYSTEM SW-3
D3104 1S1555 KILLER SW-6
Q3112,3113 2SC634A KILLER SW-2,3
Q3111,3114,3115 2SA678 KILLER SW-1,4,5
OSC AMP CONTROL
BURST PHASE DET
KILLER DET
ACC AMP
REACTANCE
IC3103
IC3103 TBA540 APC
D3112 1S1555 CLAMP-2
Q3135 2SC634A R-Y CLAMP
IC3104 TCA660B V.CHROMA CONTROL
Q3122 2SC634A H.PULSE AMP
D3111 1S1555 CLAMP-1
Q3123 2SC634A V. BLK-1
D3110 1S1555 ABL
Q3124 2SC1474 12V REG
D3113 1S1555 CLAMP-3
B-Y CONT CONTROL
R-Y CONT CONTROL
G-Y INVERTER
R-Y(S) CONTROL
B-Y(S) CONTROL
BLK CRAMP
Y CONTROL CONTRAST
D3109 HF1
D3108 1S1555 V.BLK-2
Q3137 2SC634A B-Y CLAMP
D
V.OSC, V.CENT, V.OUT, V.PARABOLA
Q5521,5522 2SA678 V.AMP-1,2(B)
Q5523 2SC1670 V.DRIVE (B)
Q5524 2SD478 V.OUT-1 (B)
Q5526 2SA678 V.PROTECT-BUFF(B)
Q5527,5528 2SC634A V.CENT-1,2 (B)
Q5529 2SA678 V.CENT-3 (B)
Q5530 2SC1475 V.CENT-OUT (B)
D5520 EQA01-25R V.OUT LIMITER (B)
Q5525 2SB568 V.OUT-2 (B)
D5519 1S1555 V.CENT PROTECT (B)
COUSTOMER CONTROL


G H I J K L M N O
1 2 3 4 5 6
CHROMA, YAMP, SYSTEM SW
KILLER SW, APC, CW AMP
R·G·B OUT, 12V REG
BB
Q3101 2SC634A CHROMA BUFF
Q3103 2SC634A TRAP SW-1
Q3102 2SC634A Y BUFF-1
Q3104 2SC634A TRAP SW-2
Q3105 2SC634A BURST AMP
Q3106 2SC634A SYSTEM SW-1
Q3107 2SC634A BURST BUFF
D3101 1S1555 PS SW-1
IC3101 TCA640 CHROMA PROSSEC
CHROMA AMP
SYSTEM SW
ACC AMP
BLK BURST GATE IDENT GATE
F·F
KILLER DET IDENT DET
BURST DET
D3102,3103 1S1555 ENL-1,2
T3107 DAT
DL3102 1H DELAY
IC3102 TCA650 DEMO DISCRI
DELAY LINE MATRIX
SYSTEM SW
P(R-Y) SW S·COMMU
R-Y DEMOD
B-Y DEMOD
R-Y LEVEL
SMB
BIAS
Q3108 2SC634A F.F BUFF
Q3109 2SC634A SYSTEM SW-2
Q3110 2SC634A SYSTEM SW-3
Q3116 2SC634A CW AMP
Q3111,3114,3115 2SA678 KILLER SW-1,4,5
D3104 1S1555 KILLER SW-6
Q3112,3113 2SC634A KILLER SW-2,3
T3111 V-PHASE
U.PHASE
Q3117 2SC634A SYSTEM SW-4
Q3120 2SA678 V AMP
Q3118 2SC634A SYSTEM SW-5
Q3119 2SA678 U. AMP
D3105-3107 1S1555 PS SW-2-4
IC3103 TBA540 APC
OSC AMP CONTROL
BURST PHASE DET
KILLER DET
ACC AMP
7.8kHz
REACTANCE
KILL
ACC
D3112 1S1555 CLAMP-2
Q3122 2SC634A H.PULSE AMP
D3111 1S1555 CLAMP-1
Q3123 2SC634A V. BLK-1
D3110 1S1555 ABL
Q3124 2SC1474 12V REG
D3113 1S1555 CLAMP-3
IC3104 TCA660B Y.CHROMA CONTROL
B-Y CONT CONTROL
R-Y CONT CONTROL
G-Y INVERTER
R-Y(S) CONTROL
B-Y(S) CONTROL
Y CONTROL CONTRAST
BLK CRAMP
D3109 HF1
D3108 1S1555 V.BLK-2
Q3137 2SC634A B-Y CLAMP
Q3135 2SC634A R-Y CLAMP
Q3125 2SA678 R-Y AMP
Q3126 2SC1475 R-Y BUFF
Q3127 2SC403C R-OUT
R·DRIVE
Q3136 2SC634A G-Y CLAMP
Q3128 2SA678 G-Y AMP
Q3129 2SC1475 G-Y BUFF
Q3130 2SC403C G-OUT
G·DRIVE
Q3131 2SA678 B-Y AMP
Q3132 2SC1475 B-Y BUFF
Q3133 2SC403C B-OUT
B·DRIVE
Q3134 2SC634A Y.BUFF-2
BKG
Q3121 2SC403C Y AMP
TH3101 S-1000
BB-1 BB-2 BB-3 BB-4 BB-5 BB-6 BB-7 BB-8 BB-9 BB-10
VP ABL HR E HDP
CB [B OUT] Q701B 2SC1723 B VIDEO OUT
CG [G OUT] Q701G 2SC1723 G VIDEO OUT
CR [R OUT] Q701R 2SC1723 R VIDEO OUT
PICTURE TUBE GROUND
[SCRN VOL] HB
SCRN-B SCRN-G SCRN-R
CHASSIS GROUND
Q9504 2SA733 PULSE AMP
D9502 1S1555 SWITCH
BA
EQA01-25R
L5504 DYv (B)
COUSTOMER CONTROL



Sony Corporation

80D0447-1
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D

【V.OSC,V. CENT, V.OUT, V. PARABOLA】

Q5521,5522 2SA678 V. AMP-1,2(B)

Q5523 2SC1670 V. DRIVE (B)

Q5524 2SD478 V. OUT-1 (B)

Q5525 2SB568 V. OUT-2 (B)

Q5526 2SA678 V. PROTECT-BUFF(B)

Q5527,5528 2SC634A V. CENT-1,2 (B)

Q5529 2SA678 V. CENT-3 (B)

Q5530 2SC1475 V. CENT-OUT(B)

D5520 EQA01-25R V. OUT LIMITER (B)

D5519 IS1555 V. CENT PROTECT (B)

D5522 EQA01-05S V. CENT ZENER

D5523 EQA01-06S ZENER LIMITER

D5513 EQA01-25R V. OUT LIMITER (G)

D5514 EQA01-08S V. CENT LIMITER (G)

D5515, 5516 IS1555 V. PROTECT SW-1, 2(B)

D5508, 5509 IS1555 V. PROTECT SW-1,2(G)

D5517 IS1555 V. PULSE RECT (B)

D5518 IS1555 V. PROTECT SW-3 (B)

D5521 EQA01-08S V. CENT LIMITER (B)

D5520 2SC1475 V. CENT OUT (G)

D5510 IS1555 V. PULSE RECT (G)

D5511 IS1555 V. PROTECT SW-3 (G)

Q5511,5512 2SA678 V. AMP-1,2(G)

Q5513 2SC1670 V. DRIVE (G)

Q5514 2SD478 V. OUT-1 (G)

Q5515 2SB568 V. OUT-2 (G)

Q5516 2SA678 V. PROTECT BUFF (G)

Q5517, 5518 2SC634A V. CENT-1,2 (G)

Q5519 2SA678 V. CENT-3 (G)

D5506 EQA01-25R V. OUT LIMITER (R)

D5507 EQA01-08S V. CENT LIMITER (R)

D5504 IS1555 V. PROTECT SW-3

D5512 IS1555 V. CENT PROTECT (G)

D5501, 5502 IS1555 V. PROTECT SW-1,2 (R)

D5503 IS1555 V. PULSE RECT (R)

D5505 IS1555 V. CENT PROTECT (R)

Q5539 2SC634A COMP AMP

Q5540 2SC1475 V. OSC-BUFF

Q5541 2SA678 V. SAWTOOTH-2 OUT

Q5542 2SC1475 V. SAWTOOTH-1 OUT

Q5543,5545 2SC634A V. PARABOLA OSC-1,2,3

Q5501,5502 2SA678 V. AMP-1,2 (R)

Q5503 2SC1670 V. DRIVE (R)

Q5504 2SD478 V. OUT-1 (R)

Q5505 2SB568 V. OUT-2 (R)

Q5506 2SA678 V. PROTECT BUFF (R)

Q5507, 5508 2SC634A V. CENT-1,2 (R)

Q5509 2SA678 V. CENT-3 (R)

Q5510 2SC1475 V. CENT-OUT (R)

Q5546 2SC1475 V. PALABOLA-1 OUT

V.SIZE V.LIN V.SKEW

V.SIZE (R)

V.CENT (B) V.CENT (G) V.CENT (R)

D-10 D-9 D-8 D-7 D-6 D-5

L5504 100µH (B) L5503 100µH (G) L5502 100µH (R)

C5507 10/25V C5505 470/25V C5504 1000/16V

C5543 3.3/25V

C5544 3.3 25V

C5545 0.001

C5546 100 25V

C5547 0.001

C5548 0.022

C5549 0.033

C5550 0.022 200V

C5551 0.022 200V

C5552 0.022 200V

C5553 39k (±1%)

C5554 47k (±1%)

C5555 47k (±1%)

C5556 47k (±1%)

C5557 47k (±1%)

C5558 47k (±1%)

C5559 47k (±1%)

C5560 47k (±1%)

C5561 47k (±1%)

C5562 47k (±1%)

C5563 47k (±1%)

C5564 47k (±1%)

C5565 47k (±1%)

C5566 47k (±1%)

C5567 47k (±1%)

C5568 47k (±1%)

C5569 47k (±1%)

C5570 47k (±1%)

C5571 47k (±1%)

C5572 47k (±1%)

C5573 47k (±1%)

C5574 47k (±1%)

C5575 47k (±1%)

C5576 47k (±1%)

C5577 47k (±1%)

C5578 47k (±1%)

C5579 47k (±1%)

C5580 47k (±1%)

C5581 47k (±1%)

C5582 47k (±1%)

C5583 22k

C5584 4.7k

C5585 180k

C5586 39k

C5587 8.2k (1W)

C5588 5k

C5589 100k

C5590 100k

C5591 24

C5592 27 (±1%)

C5593 47k (±1%)

C5594 47k (±1%)

C5595 180k

C5596 3.3k

C5597 2.2k

C5598 450 (±1%)

C5599 450 (±1%)

C5600 3.3k

C5601 470 (±1%)

C5602 470 (±1%)

C5603 470 (±1%)

C5604 470 (±1%)

C5605 470 (±1%)

C5606 470 (±1%)

C5607 470 (±1%)

C5608 470 (±1%)

C5609 470 (±1%)

C5610 470 (±1%)

C5611 470 (±1%)

C5612 470 (±1%)

C5613 470 (±1%)

C5614 470 (±1%)

C5615 470 (±1%)

C5616 470 (±1%)

C5617 470 (±1%)

C5618 470 (±1%)

C5619 470 (±1%)

C5620 470 (±1%)

C5621 470 (±1%)

C5622 470 (±1%)

C5623 470 (±1%)

C5624 470 (±1%)

C5625 470 (±1%)

C5626 12k

C5627 3.9k

C5628 15k

C5629 4.7k

C5630 470 (2W)

C5631 2.7k

C5632 2.7k

C5633 2.7k

C5634 2.7k

C5635 3.9k

C5636 1k

C5637 1.5k (1/2W)

C5638 470 (2W)

C5639 270 (1/8W)

C5640 100

C5641 270

C5642 15k

C5643 270

C5644 3.3 25V

C5645 18.2k

C5646 15k

C5647 27 (1/8W)

R5501 120k (1/2W)

R5502 27 (1/8W)

R5503 9.6k (±1%)

R5504 27 (1/8W)

R5505 27 (±1%)

R5506 1.8k (±1%)

R5507 12k (±1%)

R5508 43k (±1%)

R5509 120k (1/2W)

R5510 120k (1/2W)

R5511 6.8k

R5512 15k

R5513 15k

R5514 15k

R5515 15k

R5516 15k

R5517 22k

R5518 180k

R5519 180k

R5520 39k

R5521 8.2k (1W)

R5522 5k

R5523 100k

R5524 100k

R5525 39k

R5526 180k

R5527 8.2k (1W)

R5528 27k (3W)

R5529 180k

R5530 3.3k

R5531 22k

R5532 2.2k

R5533 22k

R5534 3.3k

R5535 1.8k (±1%)

R5536 27 (1/8W)

R5537 5.6k (±1%)

R5538 27 (1/8W)

R5539 12k (±1%)

R5540 27 (1/8W)

R5541 43k (±1%)

R5542 20k (1/2W)

R5543 120k (1/2W)

R5544 680 (1/8W)

R5545 15k

R5546 15k

R5547 15k

R5548 6.8k

R5549 27k (3W)

R5550 22k

R5551 100k

R5552 100k

R5553 39k

R5554 8.2k (1W)

R5555 100k

R5556 100k

R5557 100k

R5558 180k

R5559 180k

R5560 27k (3W)

R5561 27k (3W)

R5562 180k

R5563 3.3k

R5564 22k

R5565 2.2k

R5566 2.2k

R5567 3.3k

R5568 1.8k (±1%)

R5569 27 (1/8W)

R5570 5.6k (±1%)

R5571 27 (1/8W)

R5572 12k (±1%)

R5573 27 (1/8W)

R5574 43k (±1%)

R5575 120k (1/2W)

R5576 150k (1/2W)

R5577 6.8k

R5578 680 (1/8W)

R5579 15k

R5580 15k

R5581 27k (3W)

R5582 27k (3W)

R5583 22k

R5584 4.7k

R5585 180k

R5586 39k

R5587 8.2k (1W)

R5588 5k

R5589 100k

R5590 100k

R5591 24

R5592 27 (±1%)

R5593 27k (3W)

R5594 27k (3W)

R5595 180k

R5596 3.3k

R5597 2.2k

R5598 450 (±1%)

R5599 450 (±1%)

R5600 3.3k

RV5501 500

RV5502 470

RV5503 500

RV5504 500

RV5505 1k

RV5506 5k

RV5507 500

RV5508 500

RV5509 1k

RV5510 5k

V.OUT-1 (R) V.PROTECT BUFF(R) V.OUT-2(R) V.CENT-1,2(R) V.CENT-3 (R) V.CENT-OUT(R) V.AMP-1,2(R) V.DRIVE(R) V.OUT-1(B) V.OUT-2(B) V.PROTECT-BUFF(B) V.CENT-1,2(B) V.CENT-3(B) V.CENT-OUT(B) V.OUT LIMITER(B) V.CENT PROTECT(B) V.PULSE RECT(B) V.PROTECT SW-3(B) V.CENT LIMITER(B) V.CENT OUT(G) V.CENT LIMITER(G) V.AMP-1,2(G) V.DRIVE(G) V.OUT-1(G) V.OUT-2(G) V.PROTECT BUFF(G) V.CENT-1,2(G) V.CENT-3(G) V.OUT LIMITER(R) V.CENT LIMITER(R) V.CENT PROTECT(G) V.PULSE RECT(R) V.PROTECT SW-1,2(R) V.CENT PROTECT(R)

GA

【120V/18V REG】

Q605,606 2SC1114 120V REG

Q601 2SC867 120V DRIVE

Q602 2SC1670 REG DET

Q603 2SC1475 18V DRIVE

Q604 2SC634A REG DET

Q607 2SC867 18V REG

D601 SIB01-02 PROTECT

D602 EQA01-08S REG ZENER

D603 EQA01-06S REG ZENER

D604 V06C THERMO COMP

PICTURE BRIGHT MIN — MAX 200 — 420mA

144 — 175V

120V

18V

18V ADJ

TP921 (120V)

F601 0.5AT

L601 200µH

GA-1 GA-2 GA-3 GA-4 GA-5 GA-6 GA-7 GA-8 GA-9 GA-10 GA-12 GA-13 GA-14 GA-15

CHASSIS GROUND

GB

【H.OSC,H.DRIVE HV REG,PROTECT】

Q6214 2SC1116A HV REG

Q6224

Q6201 2SD478 HV REG DRIVE

Q6202,6203,6204 V06C THERMO COMP 1-3

Q6213 2SC1475 RELAY DRIVE-2

Q6212 2SC634A RELAY DRIVE-1

Q6214 CV12E PROTECT

Q6102,Q5103 2SC634A H OSC-1,2

D5104 IS1555 H OSC BUFFER

Q5104 2SC1723 H.DRIVE

Q5101 2SC634A SYNC SPLIT

Q6202 2SC1890A REG DET-1

Q6203 2SD478 REG DET-2

Q6207 2SA678 HV PROTECT DET

Q6208 2SC634A PROTECT DRIVE

Q6206 2SC634A V PROTECT DET

Q6205,6204 2SC634A HV DET-1,2

D6216 SIB01-02 STOPPER

D6215 IS1555 PROTECT

D6209 2SC1890A VOLTAGE PROTECT-1

D6210 2SA678 VOLTAGE PROTECT-2

D6211 IS1555 STOPPER

D6211 2SC634A IK PROTECT DET

D6205 EQA01-11S VOLTAGE PROTECT

D6206 IS1555 STOPPER

D6207 EQA01-10R PROTECT ZENER

D6208,6209 V06C THERMO COMP-1,2

D6213 IS1555 STOPPER

D6212,6210 IS1555 V C-E COMP-1,2

D5102,5103 IS1555 AFC-1,2

D5101 IS1555 STOPPER

D5102 IS1555 HOLD

T5101 HDT-1

T5102 HDT

T5103 HFT

T5104 H.DRIVE

S6102 POWER

Gc (DAMPER)

Q801 2SD725 CONV

D801, 802 SB2B DAMP-1,2

L801 H.C.A

T801 FBT-1

T802 FBT-2

TP941 TP942

Ha

【COUSTOMER CONTROL】

S9101A PAL

S9101B NTSC4.43

S9101C SECAM

Hc

【COUSTOMER CONTROL】

RV9201 PICTURE

RV9202 BRIGHT

RV9203 COLOR

RV9204 HUE

L9201 22µH

V9011 SD-102(G)

V9012 SD-102(R)

V9013 SD-102(B)

E

Q501 2SC1364 AMP

Q502 2SA733 BUFF

Q503 2SD478 OUT

T501

RV501 22k H.SUB SKEW

RV502 10k H.SUB BOW

RV5315 1k

D5322 V11N 245V RECT

D5324 V11N G2 RECT

L5304 3.3mH

L5305 3.3mH

L5306 3.3mH

RV5301 120 H.LIN (B)

RV5302 120 H.LIN

RV5303 120 H.LIN (G)

RV5304 120 H.LIN (R)

RV5305 120 H.LIN

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RV5310 120 H.LIN

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BUCH ODER IN VON SONY HERAUSGEGEBENEN ERGÄNZUNGEN ANGEGEBEN SIND.
AUF FÜR DIE BETRIEBSSICHERHEIT KRITISCHE SCHALTUNGSEINSTELLUNGEN WIRD IN DIESEM HANDBUCH HINGEWIESEN.
BEFOLGEN SIE DIESE ANWEISUNGEN STETS, WENN KRITISCHE KOMPONENTEN AUSGEWECHSELT WERDEN ODER VERDACHT AUF FUNKTIONSSTÖRUNGEN BESTEHT.

DIE BESCHLEUNIGUNGSSPANNUNG DARF NICHT ERHÖHT WERDEN, DAMIT KEINE SCHÄDLICHEN RÖNTGENSTRAHLUNGEN ERZEUGT WERDEN. SIE SOLL 27kV (MAX.) BETRAGEN.

GEPRÜFT NACH RÖNTGENVERORDNUNG V.1.3.76: ZULASSUNGSSCHEIN NR.: HH/8/79/RÖ.

Note:

- All capacitors are in μF unless otherwise noted. p : μμF 50WV or less are not indicated except for electrolytics.
- All resistors are in ohms, ¼W unless otherwise noted. k : 1000Ω, M : 1000kΩ
- ▭ : nonflammable resistor.
- △ : internal component.
- ▭ : panel designation.
- The components identified by ⊠ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

  When replacing components identified by ◪ make the necessary adjustments indicated. If results do not meet the specified value, change the component identified by ⊠ and repeat the adjustment until the specified value is achieved.
  (Refer to R6211/R6212 Adjustment, R6207/R6208 Adjustment and R614/R615 Adjustment.)
  (On Page 28) (On Page 28) (On Page 26)

When replacing the part in below table, be sure to perform the related adjustment.

Part replaced (◪)	Adjustment
DC851 R807, R808, R810 T801, T802 C802, C803, C804, C805 Q6204, Q6205, D6207 R6207, R6208, R6210, R6211 R6212	R6211/R6212 ADJUSTMENT R6207/R6208 ADJUSTMENT
R805, R806, R809 Q6201, Q6202, Q6203, Q6214 D6201, R6206, R6237	R6207/R6208 ADJUSTMENT
D602, R611, R612, R613 R614, R615	R614/R615 ADJUSTMENT

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- Reference numbers of the Q board differ from those indicated on the printed circuit board of the set.
  Read the reference numbers of the Q board by adding 1000 to those indicated.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken with a 20,000-ohm-per-volt VOM.
- ⊘ : adjustable without removing cabinet.
- ▭ : adjustment for repair.
- Readings are taken with a color-bar video signal input.
- Voltage variations may be noted due to normal production tolerances.
- ——— : B+ bus.
- ♦ : When this portion is touched with the probe of a VOM, the set will be turned off.
- Voltages in Q board are taken with the LINE switch set to 1.
- Voltages in BB board are taken with PAL color-bar video signal input.
  ( ) : SECAM
  < > : NTSC 4.43MHz